The Post Office Electrical Engineers' Journal

INDEX

VOLUMES 51-60

1959-1968

THE POST OFFICE ELECTRICAL ENGINEERS' JOURNAL

10-YEAR INDEX

Contents

	page
SUBJECT INDEX	1
AUTHOR INDEX	17
REGIONAL-NOTE INDEX	27
SENIOR STAFF APPOINTMENTS	30

NOTES:

1. The Subject index classifies all articles under the first word of the title and other key words. The titles of the individual parts of multi-part articles are given following the entry under the first word of the main title.

2. The Author index shows articles under each author's name.

3. The Journal is published in April, July, October and January and the pages in each part of Volumes 51–60 are shown in the Table.

Vol.	Year	April	July	October	January
51	1958–59	1–80	81–162	163–254	255–387
52	1959–60	1–88	89–161	163–236	237–313
53	1960–61	1–74	75–144	145–218	219–294
54	1961–62	1–72	73–150	151–218	219–294
55	1962–63	1–72	73–144	145–218	219–291
56	1963–64	1–72	73–147	149–222	223–297
57	1964–65	1–72	73–146	147–219	221–295
58	1965–66	1–75	77–148	149–222	223–293
59	1966–67	1–73	75–149	151–231	233–310
60	1967–68	1–82	83–163	165–240	241–317

Published by *The Post Office Electrical Engineers' Journal* (Price 2s. 6d. Post Paid).
2–12 Gresham Street, London E.C.2.

Subject Index

	Vol.	Page
A		
A.C. No. 9, Signalling System	55	51
A.C. Power Supplies to Museum Telephone Exchange and the Post Office Tower	58	169
A.C. Signalling Supplies, A Motor Alternator for	54	268
Accident-Prevention Posters	54	223
Accounting, Engineering Aspects of Depreciation	55	113
Act, 1950: Calculation of Benefit by Deferment of Renewal Allowance, Public Utility Street Works	60	19
Adjustment Checks of Telephone Exchange Equipment Installed by Contract, On-Site	57	243
Administrative Radio Conference, Geneva, 17 August to 21 December, 1959, The	53	53
Aerial-Cable Construction, Experiments in	52	47
Aerial Feeders, A Swept-Frequency Method of Locating Faults in Waveguide	54	27
Aerial Systems, Dual-Frequency-Band Horn	60	217
Aerials, A Microwave Model Equipment for Use in the Study of the Directivity Characteristics of Short-Wave (Parts 1 and 2)	51	126, 173
Aerials, An Analogue Computer for Investigating the Directivity Characteristics of Complex Arrays of Unit-	52	246
Aerials by Helicopter, Transportation of	57	207
Aerials for Communication with Artificial Earth Satellites, Large Steerable Microwave	55	152
Aging of Submarine Telephone Cables, A Note on the Laying Effect and	54	20
Air-Conditioning in Computer Accommodation	57	39
Alert, H. M. T. S.	54	134
All-Figure Telephone Numbers	59	40
Aloft, Working	52	262
Alternator for A.C. Signalling Supplies, A Motor	54	268
Aluminium Conductors for Telephone Cables	59	106
Aluminium in Telecommunications Cables	51	16
Ambergate, Opening of the First Production Electronic Telephone Exchange at	59	287
Amplifiers for Speech and Program Circuits, Transistor Line	54	238
Amplifiers, Low Noise Solid-State Microwave	58	11
Amplifiers of Low Intrinsic Noise, The Principles and Possible Application of some	52	212
Analogue Computer for Investigating the Directivity Characteristics of Complex Arrays of Unit-Aerials, An	52	246
Analyser—A Survey of its Use and Limitations, The Electronic Traffic	52	19
Analyser, An Electronic Pulse-Duration	51	64
Analyser for Complex 50 c/s Waveforms, A Continuous-Reading Harmonic	53	152
Analyser for Recorder Charts, An Automatic	58	257
Analyser for the Frequency Range 25-140 Mc/s, A Spectrum	54	179
Anglo-Canadian Transatlantic Telephone Cable (CANTAT): Cable Development, Design and Manufacture	56	82
Anglo-Canadian Transatlantic Telephone Cable (CANTAT): Cable-Laying Gear	56	91
Anglo-Canadian Transatlantic Telephone Cable (CANTAT): Laying the North Atlantic Link	56	99
Anglo-Canadian Transatlantic Telephone Cable (CANTAT): Submerged Repeaters, Equalizers and Associated Terminal Equipment	56	76
Anglo-Canadian Transatlantic Telephone Cable System (CANTAT), The	56	73
Anglo-Swedish Submarine Telephone Cable, The	53	165
Anglo-Swedish Submarine Telephone Cable, The Equalization During Laying of the	54	48
Announcements, Recording and Control of Information-Service	55	158
Announcer, An Improved Congestion	56	36
Announcer, No. 9A, A New Announcing Equipment—Equipment	60	264
Answering Set for Telephone Subscribers, An	53	45
Anthorn Very-Low-Frequency Radio Station	58	114
Apparatus Rooms, Ventilation of	54	225
Application of Program Evaluation and Review Techniques to P.A.B.X. Installation		
Part 1—Introduction to Program Evaluation and Review Techniques	57	193
Part 2—Development and Installation Programming for a Large Non-Standard P. A. B. X.	57	269
Arrays of Unit-Aerials, An Analogue Computer for Investigating the Directivity Characteristics of Complex	52	246
Artificial Ear, A New	60	47
Assembly for Cabinets and Pillars, A New Cross-Connexion	53	254
Assessment of Transistor Life	53	236
Audio Equipment, Transistor-Type 4-wire	56	40
Audio Frequencies, A Digital-Display Decibelmeter for	60	274
Audio-Frequency Transmission Measuring Set Using Transistors, An	55	19
Auto-Manual Centre Working, New Developments in Remote	58	119
Automatic Analyser for Recorder Charts, An	58	257
Automatic Control of the Rugby Radio (GBR) Time Signals by an Electronic Clock	53	193
Automatic Error-Correcting Radio-Telegraph Multiplex System, An	60	187
Automatic Letter Sorting—The Luton Experiment	54	31
Automatic Meter-Observation Equipment, An	53	124
Automatic Screw-Sorting Machine, An	57	32
Automatic Switching for the Telex Service	51	193
Automatic Switching of Inland Carrier-Link Sections of Transatlantic Telephone Cable Systems	56	237
Automatic Telex Service, Generation of Meter Pulses for the	52	196
Automatic Tester for Subscribers' Lines and Apparatus, An	51	120
B		
Baldock Radio-Control Station	58	86
Band-Width, Channel Equipment Design for Economy of	53	112
Battery-Powered Hearing-Aid Handset—Handset No. 5, A	54	271
Batteries, Operation and Maintenance of Secondary-Cell	59	43
Belgravia Exchange, London, Electronic Telephone Exchanges: Reed Selector System Field Trial at	60	293
"Better Opportunities in Technical Education"	56	13
Birmingham Radio Tower	58	182
Birmingham 12 Mc/s Coaxial Line System, The London-Oxford-	52	270
Borer, A Small Hand-Operated Hydraulic Thrust-	56	192
Boring Bit for Testing Wood Poles, A	51	186
Box-Building Vehicle, The Development of a	60	131
Brazed Seals in Deep-Sea Repeaters, Quality Control of	60	44
Brazing and Moulding Equipment for Use on Polythene-Insulated Submarine Coaxial Cables, Resistance	57	82
Bridges and Viaducts, Providing Post Office Plant on	58	54
Bristol, The First Subscriber-Trunk-Dialling Installation at	51	360
British Computer Society's Second Annual National Conference, Harrogate, July 1960, The	53	150
British Computer Society's Third Conference, Cardiff, September, 1962, The	55	252
British Joint Computer Conference, 1966	59	91
Broadband Transmission Systems, The Economic Usage of	51	212
Broadcasts, 14–16 October 1964 General Election	58	37
Buried Structures, Co-ordination of the Cathodic Protection of	54	101
Bus-Bar Sizes in Automatic Telephone Exchanges, Calculation of Current Values for	57	15
C		
C.C.I.R, Los Angeles, April 1959, The IXth Plenary Assembly of the	52	101
C.C.I.R. Study Group IV—Space Systems and Radio Astronomy, Washington, D.C., March 1962, The Interim Meeting of	55	96
C.C.I.T.T. Directives, The	57	268
(C.C.I.T.T.), Geneva, June 1964, Third Plenary Assembly of the International Telegraph and Telephone Consultative Committee	57	245
(C.C.I.T.T.), New Delhi, December 1960, Second Plenary Assembly of the International Telegraph and Telephone Consultative Committee	54	130
C.E.L No 8A, A 12 Mc/s Coaxial Line Equipment	54	73
C.M.I. Validation at Freiburg, West Germany, June 1959	52	198
Cabinets and Pillars, A New Cross-Connexion Assembly for	53	254
Cable (CANTAT): Cable Development, Design and Manufacture, Anglo-Canadian Transatlantic Telephone	56	82

	Vol.	Page
Cable (CANTAT): Cable-Laying Gear, Anglo-Canadian Transatlantic Telephone	56	91
Cable (CANTAT): Laying the North Atlantic Link, Anglo-Canadian Transatlantic Telephone	56	99
Cable (CANTAT): Submerged Repeater, Equalizers and Associated Terminal Equipment, Anglo-Canadian Transatlantic Telephone	56	76
Cable (COMPAC), Inauguration of the Commonwealth Pacific	57	14
Cable Construction, Experiment in Aerial-	52	47
Cable Construction in the Tropics, Plastic Telephone	53	162
Cable Creepage	52	115
Cable Cutter, A Pneumatic	58	260
Cable Developments, Small-Diameter Coaxial	57	1
Cable Diameter During Extrusion, A Photo-Electric Device for Measuring	57	79
Cable Drums, Preservation of	56	44
Cable Earth-Electrode Systems, Submarine-	57	105
Cable Fault Locator for Submarine Cables, A	55	8
Cable Joints and Gland Mouldings, X-Ray Inspection of Polythene-Insulated Submarine-	60	280
Cable Network, The Effect on Service during 1962-63 of the Pressurization of the	56	176
Cable, Polythene-Sheathed Paper-Core Unit Twin	56	32
Cable Projects, The SCOTICE/ICECAN Submarine	53	56
Cable, Prospects for Transatlantic Television by	52	136
Cable Route Across a Busy and Congested Water-Way, A Novel Way of Providing a	51	94
Cable System Between England and Germany, The New Submerged-Repeater	57	109
Cable System (CANTAT), The Anglo-Canadian Transatlantic Telephone	56	73
Cable System Direct to U.S.A.—TAT-3, A Proposed New	53	169
Cable System, Proposed Commonwealth Pacific Telephone	53	42
Cable System, SCOTICE—The United Kingdom to Iceland	55	38
Cable System to Canada, CANTAT—A New Submarine Telephone	54	220
Cable System with Transistor-Type Submerged Repeaters, St Margarets Bay—La Panne 420-circuit Submarine-	60	1
Cable Systems, Automatic Switching of Inland Carrier-Link Sections of Transatlantic Telephone	56	237
Cable Systems, New North Sea 120-Circuit Submarine-	58	93
Cable Systems, Speaker Equipment for Submarine	54	118
Cable, TAT-1 plus Ten Years, Transatlantic Telephone	60	195
Cable, The Anglo-Swedish Submarine Telephone	53	165
Cable, The Equalization During Laying of the Anglo-Swedish Submarine Telephone	54	48
Cable to Canada, Inauguration by Her Majesty the Queen of the New	54	219
Cables, A Cable-Fault Locator for Submarine	55	8
Cables, A Compander for a 12-Channel Carrier Telephone System for Use on Unloaded Audio	51	29
Cables, A Fault-Location Test Set for Repeatered Submarine	58	262
Cables, A Moisture Barrier for Polythene-Sheathed	53	253
Cables, A Note on the Laying Effect and Aging of Submarine Telephone	54	20
Cables, Aluminium Conductors for Telephone	59	106
Cables, Aluminium in Telecommunications	51	16
Cables and Distribution Frames for Block-Wired Buildings, New	58	225
Cables, Brazing and Moulding Equipment for Use on Polythene-Insulated Coaxial	57	82
Cables, Coaxial Line Equipment for Small-Diameter	55	44
Cables Containing Type 174A Small-Diameter Coaxial Pairs, Jointing of	57	132
Cables—Dessicator, Automatic, No1A, An Improved Dessicator for Pressurizing Telecommunication	60	224
Cables, Drying Out Joints in Paper-Core	60	180
Cables in Subscribers Local-Line Networks, Field Trials of Large Polythene	56	8
Cables, Increasing the Traffic Capacity of Transatlantic and other Submarine Telephone	52	140
Cables, Joint Loading of Local-Line	60	101
Cables, Line and Register Signalling for Dialling over Transoceanic Telephone	56	111
Cables, London, April 1967, Conference on Plastics in Telecommunication	60	121
Cables, Locating Faults Between Jointing Points on Pressurized	53	89
Cables, Location of Repeater Faults on Submarine Telephone	54	252
Cables, Plastics in	51	33
Cables, Polythene-Sheathed Underground Telephone	53	250
Cables, Pressurization of Telecommunication (Part 1)	55	260
(Parts 2, 3 and 4)	56	25, 129, 170
Cables, Sheath Jointing of Plastic Sheathed	59	206
Cables, Signalling Arrangements for Dialling over the Transatlantic Telephone	53	201
Cables, Synchronous Multiplex Telegraphy on Intercontinental Submarine Telephone	60	52
Cables, The Jointing of Polythene-Insulated Coaxial	51	22
Cabling for Telephone Exchanges, Over-Ceiling	54	82
Calculation of Current Values for Determining Bus-Bar Sizes in Automatic Telephone Exchanges	57	15
Calculator, A Simple Sum-of-Squares Electronic	56	6
Calibrated Signal Generator and Measuring Apparatus for International Signalling Systems, A	51	180
Calibration	53	192
Call-Failure Detection Equipment: Interim Equipment for Director and Non-Director Exchanges	60	202
Call Offices, New Lower-half Wallboards for Pay-on-Answer Coin-Boxes in Public	54	175
Calling Aid for Disabled Subscribers, A	54	233
CANTAT—A New Submarine Telephone Cable System to Canada	54	220
Capacitors and Their Reliability, Electrolytic	55	115
Carrier Frequencies in the Range 3,800-4,200 Mc/s, The Generation of Stable	52	125
Carrier-Link Sections of Transatlantic Telephone Cable Systems, Automatic Switching of Inland	56	237
Carrier Telephone System for Use on Unloaded Andio Cables, A Compander for a 12-Channel	51	29
Carrier Terminal Equipment, A Medium-Distance, Built-in Out-Band Signalling (Parts 1 and 2)	52	122, 179
Cathodic Protection of Buried Structures, Co-ordination of the	54	101
Cathodic-Protection Scheme, A Joint User	54	95
Central Service Observation Equipment Using a Transistor Controlled Motor-Uniselector	54	9
Central Telegraph Office, The Closing of the	54	186
Central Telegraph Office (C.T.O.) Pneumatic System, Closing Down of the	56	138
Chain Conveyor at Leeds Head Post Office, The Letter-Carrying	53	95
Chain Conveyors in Postal Engineering	51	53
Changes in Post Office Organization	60	123
Channel Equipment Design for Economy of Bandwidth	53	112
Character-Recognition Machine, Computer Simulation of a (Parts 1 and 2)	60	39, 104
Characteristics of Telephone Circuits in Relation to Data Transmission	59	151
Charging Groups and Rearrangement of Line Plant and Switching Equipment for Subscriber Trunk Dialling, Layout of	51	353
Circuit Provision, Using a Computer for Main-Line Planning and	58	272
Circuits for Commercial Renters, Long-Distance Private Telephone	55	187
Clean Room for the Production of Silicon Planar Transistors, A	59	34
Cleansing of Telephones, The	57	131
Clock, Automatic Control of the Rugby Radio (GBR) Time Signals by an Electronic	53	193
Clock for Television Network Switching, An Electronic	53	108
Clocks, The New Post Office Speaking	56	1
Closed-Circuit Colour Television	53	277
Closing of the Central Telegraph Office, The	54	186
Coaxial-Cable Developments, Small-Diameter	57	1
Coaxial Cables, Resistance Brazing and Moulding Equipment for Use on Polythene-Insulated Submarine	57	82
Coaxial Cables, The Jointing of Polythene-Insulated	51	22
Coaxial Line Equipment—C.E.L. No. 8A, A 12 Mc/s	54	73
Coaxial Line Equipment for Small-Diameter Cables	55	44
Coaxial Line System, The London–Oxford–Birmingham 12 Mc/s	52	270
Coaxial Pairs, Jointing of Cables Containing Type 174A Small Diameter	57	132
Code Marks in Automatic Letter-Facing and Sorting Machines, Use of Phosphorescent	54	180
Code Translator for Letter-Sorting Machines, A	52	199
Codes of Practice for the Opening and Restoration of Trenches in Public Streets, A Short History of		
Coding Desk and Code-Mark Reader for Use with Automatic Letter-Sorting Machines	51 54	108 122

	Vol.	Page
Coin-and-Fec Checking Relay-Set, A	54	230
Coin-Box for Subscribers' Installations, A Pay-on-Answer	54	176
Coin-Box System, The Pay-on-Answer	51	343
Coin-Boxes in Public Call Offices, New Lower-half Wallboards for Pay-on-Answer	54	175
Cold Rolling of Very Thin Ferrous Tapes, The	54	51
Colour for the 700-Type Telephone, Standardization and Control of	56	247
Colour Television, Closed-Circuit	53	277
Colour Television Transmission Systems, Testing 625-Line Monochrome and (Parts 1 & 2)	58	126, 165
Combined Linefinder and Final-Selector Rack, A	58	84
Comfort, Engineering Aspects of	59	26
Commission Mixte International, Bournemouth, September 1961, Meeting of the	54	258
Commission Mixte International, Paris, October, 1964, The Ninth Plenary Conference of the	57	259
Commonwealth Telecommunications Conference 1965-1966	59	116
Communication Satellite Demonstrations and Tests: 10—27 July, 1962, Preliminary Results of the Project TELSTAR	55	147
Communication Systems, Satellite	55	97
Communication with Artificial Earth Satellites, Large Steerable Microwave Aerials for	55	152
Communications for the North Sea Oil Exploration Project	58	160
Communications in the Public Service of the United Kingdom	56	223
Communications, Satellite	55	145
(COMPAC), Inauguration of the Commonwealth Pacific Cable	57	14
Compander for a 12-Channel Carrier Telephone System for Use on Unloaded Audio Cables, A	51	29
Compander Using Junction Transistors, A Speech	55	14
Component Reliability in Post Office Equipment	54	40
Component Selection and Mode of Operation, Electronic Telephone Exchanges:	59	233
Components and Materials for Submarine Repeaters	57	158
Computer Accommodation, Air Conditioning in	57	39
Computer Conference, 1966, British Joint	59	91
Computer Exhibition and Symposium on Electronic Data Processing, London, October 1961, Electronic	54	257
Computer for Main-Line Planning and Circuit Provision, Using a	58	272
Computer, Information Indexing by	60	28
Computer—Its Use in Research, The Post Office Engineering Departments'	56	133
Computer, Planning London's Future Telephone Network by	59	167
Computer Simulation of a Character-Recognition Machine		
Part 1—Processing a Character for Recognition	60	39
Part 2—Information Recoding and Character Recognition	60	104
Computer Society's Second Annual National Conference, Harrogate, July 1960, The British	53	150
Computer Society's Third Conference, Cardiff, September, 1962, The British	55	252
Computer Systems for Office Use, An Introduction to Electronic	52	13
Computer, The Developing Relationship Between the Man and the	59	85
Computer, The Post Office Engineering Department's	55	199
Computers for Telephone Traffic Engineering, The Use of Electronic Digital	58	203
Computers, On Programming	55	125
Computers, Sorting Techniques for Automatic	53	181
Computers, The London Payroll	52	142
Computing Facilities for the Post Office Engineering Department, New	58	38
Concentrator for a Telegraph Tape-Relay Network, A	55	250
Concrete	52	29
Conference, Cardiff, September 1962, The British Computers Society's Third	55	252
Conference, Geneva, 7 October—8 November, 1963, The Extraordinary Administrative Radio	56	251
Conference, Geneva, 17 August to 21 December, 1959, The Adminstrative Radio	53	53
Conference, Harrogate, July 1960, The British Computer Society's Second Annual National	53	150
Conference, London, June 1967, European Organisation for Quality Control 11th Annual	60	226
Conference 1965—1966, The Commonwealth Telecommunications	59	116
Conference, 1966, British Joint Computer	59	91
Conference on Electronic Telephone Exchanges, I.E.E.	53	235
Conference on Plastics in Telecommunication Cables, London, April 1967	60	121
Conference Repeater Using a New Voice-Switching Technique, A Prototype	59	246
Congestion Announcer, An Improved	56	36
Congress, London, 1964, The Fourth International Teletraffic	57	205
Connexions, Telephone Equipment	55	166
Connexions to Printed-Circuit Boards	57	22
Contacts for Use at Low Voltages, The Design and Testing of Semi-Permanent Metallic	53	26
Continental Telephone Services, Integration of the International and	55	22
Continental Telephone Services, Introduction of Semi-Automatic Operation of	52	89
Continuous-Reading Harmonic Analyser for Complex 50 c/s Waveforms, A	53	152
Control System for County Fire Brigades, A Remote-	57	233
Controlling Register-Translators		
Part 1—General Principles and Facilities	51	268
Part 2—Electromechanical Register-Translators	51	272
Part 3—Electronic Register-Translator using Cold-Cathode Discharge Tubes	51	280
Part 4—Magnetic-Drum Register-Translator	51	291
Convertors and the Development of a Negative-Impedance 2-Wire Repeater, The Principles of Negative-Impedance	51	206
Conveyance of Mail by Electric Vehicles	60	170
Conveyor at Leeds Head Post Office, The Letter-Carrying Chain	53	95
Conveyor at the Accountant General's Department, Chesterfield, The Selective Tray	57	254
Conveyor for Letters and Packets, A Vertical Chain	54	273
Conveyors in Postal Engineering, Chain	51	53
Cooling System for High-Power Radio Transmitters	55	40
Co-ordination of the Cathodic Protection of Buried Structures	54	101
Cordless P.A.B.X.s, An Introduction to Large	53	231
Cordless P.M.B.X. Switchboard, A New Small	54	22
Cordless Switchboard, Stafford	54	201
Cordless Telex Switchboard, A	57	110
Cords, The Use of Modern Materials for Telephone	53	175
Core-Type Register-Translator for Director Area's, Incoming (Parts 1 and 2)	59	119, 183
Corrugated Band for Twin-Band Risers, Improved Type of	58	164
Costing Study, Exchange Line	56	186
Counter, Voltage Incidence and Duration	55	264
Cover for Carriageway Manholes and Joint-boxes, A New Frame and	54	164
Creepage, Cable	52	115
Cross-Connexion Assembly for Cabinets and Pillars, A New	53	254
Cyclic-Pulse Switching Systems	51	46
Crossbar Equipment, Transit Switching Centres Using BXB1121	60	302
Crossbar Exchanges, Developments in Exchange Equipment: Post Office Introduces Electronic and	59	33
Crossbar Telephone-Exchange Switching System, The 5005 (Parts 1 and 2)	59	170, 271
Customer Response to Telephone Circuits Routed Via a Synchronous-Orbit Satellite	60	181
Cutter, A Pneumatic Cable	58	260

D

	Vol.	Page
Damage Due to Lightning and Contacts with Power Lines, Protection of Exchange Equipment and Subscribers' Installations from	53	219
Data Processing, London, October 1961, Electronic Computer Exhibition and Symposium on	54	257
Data Service to Ships	58	106
Data Transmission, Delft, 1960, International Symposium on	53	260
Data Transmission on 50-Baud Telegraph Circuits, Detection of Errors in	58	194
Data Transmission, Some Aspects of	57	264
Data Transmission, The Characteristics of Telephone Circuits in Relation to	59	151
Datel Modem No. 1A, A Modem for the Datel 600 Service—	59	108

	Vol.	Page
Datel Modem No. 1A, Performance of the	59	250
Datel Services, An Introduction to the Post Office	59	1
Datel 600 Service—Datel Modem No. 1A, A Modem for the	59	108
Datel Tester No. 1A, 2A and 2B, Test Equipment for the Datel Services—	59	262
Deaf-Blind, Doorbell Warning Device for the	58	201
Deaf Subscribers—Handset No. 4, A New Telephone for	53	24
Decade of Growth in the Trunk Telephone Network 1952-62, A	56	177
Decentralization of London's Trunk and Tandem Telephone Exchanges	59	75
Decibelmeter for Audio Frequencies, A Digital-Display	60	274
Decibelmeter, Recent Improvements in the Inking System of a Recording	52	26
Decibelmeters, Recording	51	145
Deep-Sea Measurements, Pressure and Temperature Transducers for	60	133
Delay in the Frequency Band 3.8–4.2 Gc/s, Experimental Equipment for Measuring Group	52	207
Depreciation Accounting, Engineering Aspects of	55	113
Derivation Equipment, Supergroup	54	196
Design and Technology of Silicon Planar Transistors	56	239
Design and Testing of Semi-Permanent Metallic Contacts for Use at Low Voltages, The	53	26
Design Features of the Lee Green Magnetic-Drum Register-Translator	51	137
Designing a Voice-Switched Loudspeaking Telephone—Loudspeaking Telephone No. 4	60	65
Desk Unit, New Key-and-Lamp	56	156
Dessicator, Automatic, No. 1A, An Improved Dessicator for Pressurizing Telecommunication Cables—	60	224
Detection, Gases in Underground Plant and Their	59	80
Detection of Errors in Data Transmission on 50-Baud Telegraph Circuits	58	194
Detection System for Television and V.H.F. Radio Receivers, A New	55	219
Detector, A New Dial-Pulse	60	300
Developing Relationship Between the Man and the Computer	59	85
Development	51	226
Development of a Box-Building Vehicle, The	60	131
Development of a Non-Staining Material for Telephone Feet	54	100
Development of Postal Self-Service Machines	52	272
Development of Pulse-Code Modulation Systems	59	10
Development of Routiners for Automatic Telephone Exchanges, The Progressive	60	118
Developments in Exchange Equipment: Post Office Introduces Electronic and Crossbar Exchanges	59	33
Developments in Overhead Construction	57	260
Developments in Remote Auto-Manual Centre Working, New	58	119
Device to Replace Conventional Polarized Relays, A	59	181
Dial, Automatic, No. 21, An Improved Trigger-Type Dial—The	53	40
Dial-Pulse Detector, A New	60	300
Diallers, Field Trial of Repertory	58	124
Dialling into the United Kingdom Telex Network over Long-Distance Radio Circuits	56	162
Dialling of International Trunk Telephone Calls by United Kingdom Subscribers	54	92
Dialling over the Transatlantic Telephone Cables, Signalling Arrangements for	53	201
Dials from the Test-Desk, Testing of Subscribers'	54	58
Dielectric Loss, A New Instrument for the Precise Measurement of	58	187
Differential Gain Monitoring Panel for Testing Submerged Telephone Repeaters, A	51	132
Diffraction to Study Defects Occurring During Silicon-Device Manufacture, The Use of X-Ray	59	94
Digital Display Decibelmeter for Audio Frequencies, A	60	274
Direct-Pick-Up Television Links, A Receiver for	53	239
Direct-Reading Fault Bridge—Ohmmeter No. 18A, A Test Instrument with a	60	285
Directivity Characteristics of Complex Arrays of Unit-Aerials, An Analogue Computer for Investigating the	52	246
Directivity Characteristics of Short-Wave Aerials, A Microwave Model Equipment for Use in the Study of the (Parts 1 and 2)	51	126, 173
Director and Non-Director Exchanges, Call-Failure Detection Equipment: Interim Equipment for	60	202
Director Areas, Incoming Core-Type Register-Translator for (Parts 1 and 2)	59	119, 183
Director Areas, Incoming Register-Translator for	51	303
Director Exchanges, Local Register for	51	301
Director—Final Results of the Field Trial, The Experimental Electronic	54	178
Director Using Magnetic-Core Circuits, An Experimental 3-Digit Electronic	56	255
Disabled Subscribers, A Calling Aid for	54	233
Dismantling the Long-Wave Masts at Leafield Radio Station	55	129
Display and Recording Equipment for the Frequency Range 50 kc/s–8 Mc/s, An Insertion-Loss	53	145
Distortion in Television Links, Waveform (Parts 1 and 2)	52	108, 188
Distortion on Physical (D.C.) Lines and Telegraph Machines, Telegraph	52	61
Distribution Frames for Block-Wired Buildings, New Cables and	58	225
Doorbell Warning Device for the Deaf-Blind	58	201
Drum-Type Machine for cleaning Mail Bags, The	53	36
Drums, Preservation of Cable	56	44
Dry-Reed Relays—Post Office Relays Type 14 and Type 15	58	46
Drying Out Joints in Paper-Core Cables	60	180
Dual-Frequency-Band Horn-Aerial Systems	60	217
Duct-Rodding Machine, A.	57	180
Duct-Rodding Problem—Ductmotor No. 1, A New Approach to the	58	91
Ductile Permanent-Magnet Materials	53	262
Ductmotor No. 1, A new Approach to the Duct-Rodding Problem—	58	91
Ducts by Moleplough, Laying Plastic	59	104
Ducts, The Manufacture of Earthenware	56	231

E

	Vol.	Page
Ear, A New Artificial	60	47
Early Bird, The Launch of the Communications Satellite HS-303	58	125
Earth Electrode Systems, Submarine-Cable	57	105
Echo Suppressor for Long-Distance Communications, A New	60	288
Economic Usage of Broadband Transmission Systems, The	51	212
Education, Better Opportunities in Technical	56	13
Effect of Railway Electrification on Post Office Circuits	53	184
Effect on Service During 1962–63 of the Pressurization of the Trunk Cable Network	56	176
Efficient Electronic Switch–The Bothway Gate, An	52	37
Electra House, London. A push-Button Torn-Tape Relay System for	57	175
Electric Underfloor Heating	56	181
Electrical Properties of High-Frequency Transistors, The	57	54
Electrolytic Capacitors and Their Reliability	55	115
Electronic and Crossbar Exchanges. Developments in Exchange Equipment: Post Office Introduces	59	33
Electronic Calculator, A Simple Sum-of-Squares	56	6
Electronic Clock, Automatic Control of the Rugby Radio (GBR) Time Signals by an	53	193
Electronic Clock for Television Network Switching, An	53	108
Electronic Computer Exhibition and Symposium on Electronic Data Processing, London, October 1961	54	257
Electronic Computer Systems for Office Use, An Introduction to	52	13
Electronic Digital Computers for Telephone Traffic Engineering, The Use of	58	203
Electronic Director—Final Results of the Field Trial, The Experimental	54	178
Electronic Director Using Magnetic-Core Circuits, An Experimental 3-Digit	56	255
Electronic Exchange in Dollis Hill Laboratories, Model	52	260
Electronic Exchange Systems at Leamington and Peterborough, Reed Relays in the Small	58	52
Electronic Exchanges at Leamington and Peterborough, The Field Trial of Two Small	58	1
Electronic Pulse-Duration Analyser, An	51	64
Electronic Register-Translators, Reliability and Maintenance of	57	151
Electronic Speech Voltmeter Type 5A, The	53	92
Electronic Switch–The Bothway Gate, An Efficient	52	37

	Vol.	Page
Electronic Switching Equipment, Voltage-Margin Testing of Telegraph	53	173
Electronic Telegraph Buffer Store Using a Magnetic Drum, An	56	262
Electronic Telegraph Serial-Numbering Transmitter, An	55	195
Electronic Telephone Exchange at Ambergate, Opening of the First Production	59	287
Electronic Telephone Exchange, The Highgate Wood	55	265
Electronic Telephone Exchange, The Leighton-Buzzard	59	255
Electronic Telephone Exchanges: An Introduction to Switching Network Design	60	124
Electronic Telephone Exchanges: An Introductory Review of Developments	59	211
Electronic Telephone Exchanges: Component Selection and Mode of Operation	59	233
Electronic Telephone Exchanges, I.E.E. Conference on	53	235
Electronic Telephone Exchanges: Reed Relays for Exchange Systems	60	140
Electronic Telephone Exchanges: Reed-Selector System Field Trial at Belgravia Exchange, London	60	293
Electronic Traffic Analyser—A Survey of its Use and Limitations, The	52	19
Emergency Mobile Teleprinter Automatic Switching Units	53	268
Emergency Telephones for the London-Yorkshire Motorway	52	243
Engineer-in-Chief's Library Information Service, The	54	111
Engineering Aspects of Depreciation Accounting	55	113
Engineering Aspects of Staff Comfort	59	26
Engineering Department, New Computing Facilities for the Post Office	58	38
Engineering Departments Computer—Its Use in Research, The Post Office	56	133
Engineering Departments' Main Conference Room, Ventilation Plant for the Post Office	56	194
Engineering Vehicles, Four New	53	257
Engineers-in-Chief, Ninety-Seven Years of	60	83
Engines, Propane Gas as a Fuel for Small Internal-Combustion	54	265
Equalization During Laying of the Anglo-Swedish Submarine Telephone Cable, The	54	48
Equipment and Testing Facilities at the Experimental Satellite Ground Station, Goonhilly Downs, Cornwall	55	105
Equipment, Announcer, No. 9A, A New Announcing Equipment—	60	264
Equipment for the Measurement of Some Characteristics of the Noise in Telephony and Television Channels	55	231
Equipment for the Provision of Statistical Data Concerning Subscriber-Dialled Trunk Calls	53	127
Equipment for Training Letter-Sorting-Machine Operators	52	55
Error-Correction Equipment Used on H.F. Radio Telegraph Services, Improvements in Automatic	55	253
Error-Correcting Equipment, Testing Radio-Telegraph Automatic	54	245
Error-Correcting Radio-Telegraph Multiplex System, An Automatic	60	187
Error-Correcting Radio-Telegraph Systems, A Transistor-Type Self-Synchronizing 7-Unit Monitor for Automatic	57	37
Error-Correcting Systems for Use on Radio-Telegraph Circuits, A Monitor for 7-Unit Synchronous	53	1
Errors in Data Transmission on 50-Baud Telegraph Circuits, Detection of	58	194
European Organization for Quality Control 11th Annual Conference, London, June 1967	60	226
Evaluation of New Types of Paint for Post Office Use, Examination and	54	261
Examination and Evaluation of New Types of Paint for Post Office Use	54	261
Exchange Equipment Engineering and Installation Methods, Recent Changes to Telephone	60	59
Exchange-Line Costing Study	56	186
Exhibition and Symposium on Electronic Data Processing, London, October 1961, Electronic Computer	54	257
Exhibition of Subscribers' Apparatus and Associated Equipment at 2–12 Gresham Street, London, E.C.2.	53	265
Exhibitions at 2—12 Gresham Street, London, E.C.2., Inland Radio Planning and Provision Branch	56	244
Experimental Electronic Director—Final Results of the Field Trial, The	54	178
Experimental Equipment for Measuring Group Delay in the Frequency Band 3.8–4.2 Gc/s	52	207
Experimental 3-Digit Electronic Director Using Magnetic-Core Circuits, An	56	255
Experiments in Aerial-Cable Construction	52	47
Extension of Ongar Radio Station	53	158
External Engineering Work, Portable Electric Power Equipment and Tools for	57	226
External Practices at Post Office Radio Stations	58	77
Extraordinary Administrative Radio Conference, Geneva, 7 October–8 November, 1963 The	56	251

F

Failure Detection Equipment: Interim Equipment for Director and Non-Director Exchanges, Call-	60	202
Failure of Plastics Insulants due to Silver Migration, The	58	245
Faraday Lecture 1961–62, The	55	1
Fault Bridge—Ohmmeter No. 18A, A Test Instrument with a Direct-Reading	60	285
Fault-History Records for the Maintenance of Telephone Switching Mechanisms, The Use of	58	19
Fault-Location Test for Repeatered Submarine Cables, A	58	262
Fault Locator for Submarine Cables, A Cable–	55	8
Fault-Recorder for Automatic Exchange Routiners, A Transportable	57	197
Fault Recorder No. 1B	55	185
Faults Between Jointing Points on Pressurized Cables, Locating	53	89
Felling of Latticed Steel Masts at Somerton Radio Station	53	274
Ferrous Tapes, The Cold Rolling of Very Thin	54	51
Field Trial of Repertory Diallers	58	124
Field Trial of the Trimphone—Telephone No. 712	58	8
Field Trial of Two Small Electronic Exchanges at Leamington and Peterborough, The	58	1
Field Trials of Large Polythene Cables in Subscribers' Local-Line Networks	56	8
51-Type Construction, An Improved Form of Mechanical Construction for Transmission Equipment—	51	197
Figure Telephone Numbers, All–	59	40
Final-Selector Rack, A Combined Linefinder and	58	84
Finish on Apparatus, The Use of Hammer	55	43
Fire Brigades, A Remote Control System for County	57	233
Fire Hazards and Materials	59	16
First International Conference on Information Processing at Paris, June 1959	52	206
First Months of Subscriber Trunk Dialling, The	52	144
First Subscriber-Trunk-Dialling Installation at Bristol, The	51	360
5-Digit Meter, The	51	331
5005-Crossbar Telephone-Exchange Switching System, The		
Part 1—Trunking and Facilities	59	170
Part 2—Application and Maintenance	59	271
Flameproof Table Telephone with an Intrinsically Safe Handset, A New	54	234
Fleet (London) Automatic Telex Exchange	54	53
Flood-Testing of the Magnetic-Drum Register-Translator	54	259
Footway Joint Boxes, Temperature Tests for Transmission Equipment Located in	56	160
Foreword, Subscriber Trunk Dialling	51	255
405-Line Television Networks, Testing Facilities and Methods for	56	275
Four New Engineering Vehicles	53	257
4,000-Type Selector, The	51	168
4-Wire Extension Principle for Small Cordless P.M.B.X. Switchboards, The	53	167
Fourth International Teletraffic Congress, London, 1964., The	57	205
Frame and Cover Carriageway Manholes and Jointboxes, A New	54	164
Frame, The Telephone Exchange Main Distribution	53	226
Frames for Block-Wired Buildings, New Cables and Distribution	58	225
Frequency Comparison, An International Experiment in	55	80
Frequency-Generating Equipment for the Transoccanic Line-Signalling System	56	119
Frequency-Meter Operating in the H_{011} Mode in the Range 3,975–4,275 Mc/s	52	129
Frequency-Modulated Voice-Frequency Telegraph Systems for Radio Telegraph Services	53	21

	Vol.	Page
Frequency Range 50 kc/s—8Mc/s, An Insertion-Loss Display and Recording Equipment for the	53	145
Furniture for Use in Engineering Installation Offices, New Designs of	54	57
Fuses, A Tester for Surge-Resistant	54	262

G

Gases in Underground Plant and Their Detection	59	80
Gate, An Efficient Electronic Switch—The Bothway	52	37
General Election Broadcasts, 14—16 October 1964	58	37
General Plan for Subscriber Trunk Dialling, The	51	258
Generation of Meter Pulses for the Automatic Telex Service.	52	196
Generation of Stable Carrier Frequencies in the Range 3, 800—4, 200 Mc/s, The	52	125
Generator and Measuring Apparatus for International Signalling Systems, A Calibrated Signal	51	180
Generator for Testing Band 7 (H.F.) Radio Transmitters, A Signal	53	160
Gold-Plated Surfaces, Soft-Soldering to	58	268
Goonhilly Downs, Cornwall, Equipment and Testing Facilities at the Experimental Satellite Ground Station,	55	105
Goonhilly Radio Station, The Helium System of the Maser Installation at	56	29
Group Delay in the Frequency Band 3·8—4·2 Gc/s, Experimental Equipment for Measuring	52	207
Group Reference-Pilot Signal, The	55	237

H

H.F. Radio-Telephone Circuits, The Lincompex System for the Improvement of	59	163
H.M.T.S. Alert	54	134
HS-303 Communications Satellite Project, The	57	221
Hammer Finish on Apparatus, The Use of	55	43
Handling, Manual Lifting and	53	82
Handset No. 4, A New Telephone for Deaf Subscribers—	53	24
Handset No. 5, A Battery-Powered Hearing-Aid Handset—	54	271
Handset No. 7, A 700-Type Telephone Handset Providing Lamp Calling Signals—	58	250
Harbour Crossings, Pipe-Laying in Tidal Rivers and	56	166
Hardening of Diagonal-Cutting Nippers, Induction	53	247
Harmonic Analyser for Complex 50 c/s Waveforms, A Continuous-Reading	53	152
Headset for Telephone Operators, A Light-weight	53	177
Hearing Aid, A Transistor	52	163
Hearing Aid for Bone-Conduction Receivers, A Transistor	57	86
Hearing-Aid Handset—Handset No. 5, A Battery-Powered	54	271
Heating, Electric Underfloor	56	181
Height-Measuring Instrument, An Optical	54	250
Helium System of the Maser Installation at Goonhilly Radio Station, The	56	29
Her Majesty the Queen of the New Cable to Canada, Inauguration by	54	219
Her Majesty the Queen, Subscriber Trunk Dialling. Inauguration by	51	257
Her Majesty the Queen's Visit to Canada	52	140
High Frequency (3—30 MHz) Radio Receiver, The P.V.R. 800.	60	204
Highgate Wood Electronic Telephone Exchange, The	55	265
High-Power Radio-Frequency Broad-Band Transformers	51	8
Horn-Aerial Systems, Dual-Frequency-Band	60	217
House Exchange System—House Exchange System No. 3, A Simplified	56	15
House of Commons, A New Signalling System for Divisions and Counts in the	51	163
Housing Estates, Practical Aspects of Providing Telephone Plant on New	59	241
Housing of Repeater Equipment Underground	56	158
Human Factors in Telephony	60	174

I

I.E.E. Conference on Electronic Telephone Exchanges	53	235
I.T.U. Seminar on "The Telephone Service", London, September 1966	59	282
ICECAN Submarine Cable Projects, The SCOTICE/	53	56
Iceland Cable System, SCOTICE—The United Kingdom to	55	38
Improved Congestion Announcer, An	56	36
Improved Dessicator for Pressurizing Telecommunications Cables—Dessicator, Automatic, No. 1A, An	60	224
Improved Form of Mechanical Construction for Transmission Equipment—51-Type Construction, An	51	197
Improved Trigger-Type Dial—The Dial, Automatic, No. 21, An	53	40
Improved Type of Corrugated Band for Twin-Band Risers	58	164
Improvements in Automatic Error-Correction Equipment Used on H.F. Radio Telegraph Services	55	253
Improvements in Installation Methods for Telephone Exchanges	55	92
Improvements in the 15 Cwt Class of Engineering Vehicle	57	9
Improvements in the Teleprinter No. 7	55	240
Improvements to the Post Office Type 2 Uniselector	57	156
Inauguration by Her Majesty the Queen of the New Cable to Canada	54	219
Inauguration by Her Majesty the Queen, Subscriber Trunk Dialling.	51	257
Inauguration of the Commonwealth Pacific Cable (COMPAC)	57	14
Incoming Core-Type Register-Translator for Director Areas		
Part 1—Principles of Design	59	119
Part 2—The Functional Design	59	183
Incoming Register-Translator for Director Areas	51	303
Increasing the Traffic Capacity of Transatlantic and other Submarine Telephone Cables	52	140
Indexing by Computer, Information	60	28
Inductance of Transmission Lines—A Correction to be Applied to Bridge Readings, Measurement of the	58	249
Induction Hardening of Diagonal-Cutting Nippers	53	247
Information Indexing By Computer	60	28
Information Processing at Paris, June 1959, First International Conference on	52	206
Information-Service Announcements, Recording and Control of	55	158
Inking System of a Recording Decibelmeter, Recent Improvements in the	52	26
Inland Radio Planning and Provision Branch Exhibitions at 2—12 Gresham Street London, EC2.	56	244
Insertion-Loss Display and Recording Equipment for the Frequency Range 50 kc/s—8Mc/s, An	53	145
Insertion-Loss Measuring Equipment (10 kc/s—1.5 Mc/s), A Self-Tuning	52	280
Inspection and Subsequent Treatment of Recovered Stores, The	52	295
Inspection of Apparatus Parts, Measuring Techniques for the	54	235
Inspection of Polythene-Insulated Submarine-Cable Joints and Gland Mouldings, X-Ray	60	280
Installation, Application of Program Evaluation and Review Techniques to P.A.B.X. (Parts 1 and 2)	57	193, 269
Installation Methods for Telephone Exchanges, Improvements in	55	92
Installation Methods, Recent Changes to Telephone Exchange Equipment Engineering and	60	59
Installation of Letter-Sorting Machines at Preston	58	271
Installation Offices, New Designs of Furniture for Use in Engineering	54	57
Instrument for the Precise Measurement of Dielectric Loss, A New	58	187
Integrated Circuit, Semiconductor Device Developments: (Parts 1 and 2)	60	20, 110
Integration of the International and Continental Telephone Services	55	22
Intercontinental Automatic Telex Service, Switching and Signalling Techniques for the (Parts 1 and 2)	60	210, 266
Intercontinental Submarine Telephone Cables, Synchronous Multiplex Telegraphy on	60	52
Interference, Radio (Parts 1—6)	50	226, 227
	51	40, 115, 202
	52	43
Interim Meeting of C.C.I.R. Study Group IV —Space Systems and Radio Astronomy, Washington, D.C., March 1962, The	55	96

	Vol.	Page
Internal-Combustion Engines, Propane Gas as a Fuel for Small	54	265
International and Continental Telephone Services, Integration of the	55	22
International Congress on Telephone Traffic, Paris, 1961, The Third	54	244
International Experiment in Frequency Comparison, An	55	80
International Maintenance Centre, The London	52	96
International Signalling Systems, A Calibrated Signal Generator and Measuring Apparatus for	51	180
International Subscriber Dialling from the London Area to Paris, Introduction of	56	33
International Subscriber Dialling of Calls to Europe, Arrangements for	57	75
International Symposium on Data Transmission Delft, 1960	53	260
International System of Units—SI Units, The	58	265
International Telegraph and Telephone Consultative Committee (C.C.I.T.T.), Geneva, June 1964, Third Plenary Assembly of the	57	245
International Telex Calls, Subscriber Dialling of	54	103
International Trunk Telephone Calls by United Kingdom Subscribers, Dialling of	54	92
Introduction of International Subscriber Dialling from the London Director Area to Paris.	56	33
Introduction of Semi-Automatic Operation of Continental Telephone Services	52	89
Introduction of Subscriber Trunk Dialling at Unit Automatic Exchanges	59	20
Introduction to Electronic Computer Systems for Office Use, An	52	13
Introduction to Large Cordless P.A.B.X.s, An	53	231
Introduction to Printed Circuits and Their Application to Telecommunications, An	52	170
Introduction to the Post Office Datel Service, An	59	1
Isolator for Use at 4, 000 Mc/s, A Resonance	52	69

J

Jacks for Telephone Exchange Equipment, New Test	53	48
Joint-Box Frames and Covers Using Polyester Resin, Raising and Setting Manholes and	56	252
Joint-Boxes, A New Frame and Cover for Carriageway Manholes and	54	164
Joint Loading of Local-Line Cables	60	101
Joint Use of Poles for Telecommunication and Power Lines, The	55	31
Joint-User Cathodic-Protection Scheme, A	54	95
Jointing of Cables Containing Type 174A Small-Diameter Coaxial Pairs	57	132
Jointing of Polythene-Insulated Coaxial Cables, The	51	22
Joints, A Wire-Wrapping Tool for Solderless	58	111
Joints and Gland Moulding, X-Ray Inspection of Polythene-Insulated Submarine-Cable	60	280
Joints in Paper-Core Cables Drying Out	60	180
Joints in Telephone Exchanges, Solderless Wrapped	54	204
Journal, The Post Office Electrical Engineers' The (History 1908—1958)	51	4

K

Key-and-Lamp Desk Unit, New	56	156
Key of Improved Design, A Miniature Lever	55	29

L

Laboratory Test Equipment for Synchronous Regenerating Radio Telegraph Systems	52	276
Ladders, Modifications to Aluminium-Alloy	53	80
Large Steerable Microwave Aerials for Communication with Artificial Earth Satellites	55	152
Lasers and Communications	57	182
Launch of the Communications Satellite HS-303 Early Bird	58	125
Laying Effect and Ageing of Submarine Telephone Cables, A Note on the	54	20
Laying Plastic Ducts by Moleplough	59	104
Layout of Charging Groups and Rearrangement of Line Plant and Switching Equipment for Subscriber Trunk Dialling	51	353
Leafield Radio Station, Dismantling the Long-Wave Masts at	55	129
Leafield Radio Station, The New (Parts 1-3)	50	130, 178, 196, 267, 283
Leamington and Peterborough, The Field Trial of Two Small Electronic Exchanges at	58	1
Learning—A New Design for Training, Programmed (Part 1)	60	253
Lee Green Magnetic-Drum Register-Translator, Design Features of the	51	137
Leeds Head Post Office, The Letter-Carrying Chain Conveyor at	53	95
Leeds Parcel-Sorting Office, The Mechanization of	54	151
Leighton-Buzzard Electronic Telephone Exchange The	59	255
Letter-Carrying Chain Conveyor at Leeds Head Post Office, The	53	95
Letter-Facing and Sorting Machines, Use of Phosphorescent Code Marks in Automatic	54	180
Letter-Sorting Equipment, Time-Shared Code Translators for	55	173
Letter-Sorting Machine, A Single-Operator (Parts 1 and 2)	51	104, 188
Letter-Sorting-Machine Operators, Equipment for Training	52	55
Letter-Sorting Machines, A Code Translator for	52	199
Letter-Sorting Machines at Preston, Installation of	58	271
Letter-Sorting Machines, Coding Desk and Code-Mark Reader for Use with Automatic	54	122
Letter Sorting—The Luton Experiment, Automatic	54	31
Letters and Packets, A Vertical Chain Conveyor for	54	273
Library Information Service, The Engineer-in-Chief's	54	111
Lifter, Manhole Cover, No. 3, A New Manhole-Cover Lifter—	60	251
Lifters, Manhole-Cover	51	70
Lifting and Handling, Manual	53	82
Lifts in the Post Office Tower, London, Passenger	58	228
Light-weight Headset for Telephone Operators, A	53	177
Lighting for Motor-Transport Workshops, Special	58	107
Lighting of Telephone Apparatus Repair Benches, The	54	274
Lightning and Contacts with Power Lines, Protection of Exchange Equipment and Subscribers' Installations from Damage Due to	53	219
Lincompex System for the Improvement of H.F. Radio-Telephone Circuits, The	59	163
Line and Register Signalling Systems for Dialling over Transoceanic Telephone Cables	56	111
Line Connectors, Subscribers'	52	237
Line-Construction Vehicle, A	55	226
Line Plant and Switching Equipment for Subscriber Trunk Dialling, Layout of Charging Groups and Rearrangement of	51	353
Line-Signal Monitoring Unit Using Transistors, A	53	121
Linefinder and Final-Selector Rack, A Combined	58	84
Linefinder System, Subscribers' 50-Point	51	81
Loading of Local-Line Cables, Joint	60	101
Loading Pots, The Repair of Faulty	59	5
Local-Call Timers	51	333
Local-Call Timing at Non-Director Telephone Exchanges	55	83
Local-Line Cables, Joint Loading of	60	101
Local Register for Director Exchanges	51	301
Locating Faults Between Jointing Points on Pressurized Cables	53	89
Location of Repeater Faults on Submarine Telephone Cables	54	252
Logical and Memory Circuits, The Use of Magnetic Cores in	56	46
London International Maintenance Centre, The	52	96
London-Oxford-Birmingham 12 Mc/s Coaxial Line System, The	52	270
London Payroll Computers, The	52	142
London Radiophone Service, The	59	98
London Telex Engineering Control, The	51	58
London-Yorkshire Motorway, Emergency Telephones for the	52	243
London's Future Telephone Network by Computer, Planning	59	167
Long-Distance Communications, A New Echo Suppressor for	60	288
Long-Distance Private Telephone Circuits for Commercial Renters	55	187
Long-Distance Transmission by Waveguide	52	213
Loudspeaking Telephone, No. 1, A Loudspeaking Telephone without Voice Switching—	54	1
Loudspeaking-Telephone No. 3, A Waterproof Loudspeaking Telephone—	55	6
Loudspeaking Telephone No. 4, Designing a Voice-Switched Loudspeaking Telephone—	60	65
Loudspeaking Telephone without Voice Switching—Loudspeaking-Telephone No. 1, A	54	1
Low-Noise Solid-State Microwave Amplifiers	58	11
Luton Experiment, Automatic Letter Sorting—The	54	31

	Vol.	Page
M		
Machine, Computer Simulation of a Character-Recognition (Parts 1 and 2)	60	39, 104
Machine for Ticking-in Mails at Sorting Offices, Tape-Recording,	56	118
Machines, A Code Translator for Letter-Sorting	52	199
Machines, Development of Postal Self Service	52	272
Machines, Parcel-Label Printing and Issuing	52	218
Machines, Trench-Cutting	60	14
Magnet Materials, Ductile Permanent-	53	262
Magnetic-Core Circuits, An Experimental 3-Digit Electronic Director Using	56	255
Magnetic Cores in Logical and Memory Circuits, The Use of	56	46
Magnetic Drum, An Electronic Telegraph Buffer Store Using a	56	262
Magnetic-Drum Register-Translator, Design Features of the Lee Green	51	137
Magnetic-Drum Register-Translator, Flood-Testing of the	54	259
Magnetic-Drum-Type Automatic Traffic Equipment with Transistor Switching Elements, A	53	50
Mail Bags, The Drum-Type Machine for Cleaning	53	36
Mail By Electric Vehicles, Conveyance of	60	170
Mail, Mechanization of the Initial Stages of Processing (Parts 1 and 2)	52 53	286 12
Mail, The Vertical Conveyance of	51	112
Main-Line Planning and Circuit Provision, Using a Computer for	58	272
Maintenance Aspects of Subscriber Trunk Dialling	51	369
Maintenance Centre, The London International	52	96
Maintenance of Electronic Register-Translators, Reliability and	57	167
Maintenance of Secondary-Cell Batteries, Operation and	59	43
Maintenance of Telephone Switching Mechanisms, The Use of Fault-History Records for the	58	19
Manhole and Joint-Box Frames and Covers Using Polyester Resin, Raising and Setting	56	252
Manholes and Joint-boxes, A New Frame and Cover for Carriageway	54	164
Manhole-Cover Lifter—Lifter, Manhole Cover, No. 3, A New	60	251
Manhole-Cover Lifters	51	70
Manual Lifting and Handling	53	82
Manufacture of Earthenware Ducts, The	56	231
Market-Research Trial, Subscriber Push-Button Telephones	59	200
Maser Installation at Goonhilly Radio Station, The Helium System of the	56	20
Mast for Radio Stations, A 150-Foot	53	271
Masts at Leafield Radio Station, Dismantling the Long-Wave	55	129
Masts at Somerton Radio Station, Felling of Lattic-ed Steel	53	274
Material for Telephone Feet, Development of a Non-Staining	54	100
Materials and Fire Hazards	59	16
Materials for Telephone Cords, The Use of Modern	53	175
Measurement of Dielectric Loss, A New Instrument for the Precise,	58	187
Measurement of Some Characteristics of the Noise in Telephony and Television Channels, Equip-ment for the	55	231
Measurement of the Inductance of Transmission Lines—A Correction to be Applied to Bridge Readings	58	249
Measurements, Pressure and Temperature Trans-ducers for Deep-Sea	60	133
Measuring Apparatus for International Signalling Systems, A Calibrated Signal Generator and	51	180
Measuring Equipment (10 kc/s–1-5 Mc/s), A Self-Tuning Insertion-Loss	52	280
Measuring Quality of Service on Trunk Routes	60	227
Measuring Set Using Transistors, An Audio-Frequency Transmission	55	19
Measuring Techniques for the Inspection of Appara-tus Parts	54	235
Mechanization of Leeds Parcel-Sorting Office, The	54	151
Mechanization of the Initial Stages of Processing Mail		
Part 1—Segregation of the Various Classes of Mail	52	286
Part 2—Automatic Facing and Stamp Cancella-tion	53	12
Medium-Distance, Built-in Out-Band Signalling, Carrier Terminal Equipment, A		
Part 1—General Performance Requirements	52	122
Part 2—Description of Equipment	52	179
Meeting of the Commission Mixte Internationale, Bournemouth, September 1961	54	258
Memory Circuits, The Use of Magnetic Cores in Logical and	56	46
Men, Circuits and Systems Telecommunications	60	241
Mercury-Vapour Rectifiers, A Portable Emmis-sion Tester for	57	128
Meter Equipment, Subscribers' Private	51	338
Meter-Observation Equipment, An Automatic	53	124
Meter Operating in the H_{011} Mode in the Range 3,975–4,275 Mc/s, Frequency-	52	129
Meter-Pulse Registration, New Methods of	54	168
Meter Pulses for the Automatic Telex Service, Generation of	52	196
Meter, The 5 Digit	51	331
Metering over Junctions	51	335
Metering, Periodic	51	320
Metering, Pulse-Generating and Tariff-Control Equipment for Periodic	51	324
Meters, Photographing Subscribers'	55	152
Microwave Aerials for Communication with Arti-ficial Earth Satellites, Large Steerable	55	152
Microwave Amplifiers, Low-Noise Solid-State	58	11
Microwave Links, Post Office Tower, London, and the United Kingdom Network of	58	199
Microwave Model Equipment for Use in the Study of the Directivity Characteristics of Short-Wave Aerials, A		
Part 1—General Considerations and Discription of Model Equipment	51	126
Part 2—Some Investigations Carried Out with the Model Equipment	51	173
Microwave Radio-Relay Links, Path-Testing for	58	26
Miniature Lever Key of Improved Design, A	55	29
Ministry of Works Research and Development Group, The Work of the Joint Post Office and	52	251
Mobile Non-Director Telephone Exchanges	57	89
Mobile-Radio Services, Monitoring Station for	55	228
Mobile-Radio Services, Narrower-Frequency-Band Channels for V.H.F. Band	55	192
Model Electronic Exchange in Dollis Hill Labora-tories	52	260
Modem for the Datel 600 Service—Datel Modem No. 1A, A	59	108
Modifications to Aluminium-Alloy Ladders	53	80
Modulation, Pulse Code (Parts 1 and 2)	54	86, 189
Moisture Barrier for Polythene-Sheathed Cables, A	53	253
Moleplough, Laying Plastic Ducts by	59	104
Monitor for Automatic Error-Correcting Radio-Telegraph Systems, A Transistor-Type Self-Synchronizing 7-Unit	57	37
Monitor for 7-Unit Synchronous Error-Correcting Systems For Use on Radio-Telegraph Circuits, A	53	1
Monitoring Station for Mobile-Radio Services	55	228
Monitoring Unit Using Transistors, A Line-Signal	53	121
Monochrome and Colour Television Transmission Systems, Testing 625-Line (Parts 1 and 2)	58	126, 165
Motor Alternator for A.C. Signalling Supplies, A	54	268
Motor-Transport Workshops, Special Lighting for	58	107
Motorway Emergency Telephone Systems, Selective Voice-Frequency Signalling for	55	181
Motorway, Emergency Telephones for the London-Yorkshire	52	243
Multi-Channel Voice-Frequency Telegraph System Using Transistors, A	57	95
Museum Radio Tower	55	73
Museum Telephone Exchange and Post Office Tower, A.C. Power Supplies to	58	169
N		
Narrower-Frequency-Band Channels for V.H.F. Land Mobile-Radio Services	55	192
Negative-Impedance 2-Wire Repeater, The Principles of Negative-Impedance Convertors and the Development of a	51	206
New Announcing Equipment—Equipment, Announcer, No. 9A, A	60	264
New Approach to the Duct-Rodding Problem—Duct Motor No. 1, A	58	91
New Artificial Ear, A	60	47
New Cables and Distribution Frames for Block-Wired Buildings	58	225
New Carbon Transmitter—Transmitter Inset No. 16, A	58	102

	Vol.	Page
New Coast Radio Stations	53	170
New Computing Facilities for the Post Office Engineering Department	58	38
New Cordless P.M.B.X. Switchboards—P.M.B.X. s No. 2/3A and 2/4A	55	244
New Cross-Connexion Assembly for Cabinets and Pillars, A	53	245
New Designs of Furniture for Use in Engineering Installation Offices	54	57
New Detection System for Television and V.H.F. Radio Receivers, A	55	219
New Developments in Remote Auto-Manual Centre Working	58	119
New Dial-Pulse Detector, A	60	300
New Echo Suppressor for Long-Distance Communications, A	60	288
New Flameproof Table Telephone with an Intrinsically Safe Handset, A	54	234
New Frame and Cover for Carriageway Manholes and Joint-Boxes, A	54	164
New Housing Estates, Planning Telephone Plant for	58	234
New Instrument for the Precise Measurement of Dielectric loss, A	58	187
New Jointers' Tents—Tents Jointers', No. 3 and 4	59	52
New Key-and-Lamp Desk Unit	56	156
New Leafield Radio Station, The		
Part 1—General Principles	59	130
Part 2—The Control System	59	178
Part 3—Carrier Generation	59	196
Part 4—The H.F. Transmitters	59	267
Part 5—The External and Switching Plant	59	283
New Lower-half Wallboards for Pay-on-Answer Coin-Boxes in Public Call Offices	54	175
New Manhole-Cover Lifter—Lifter, Manhole Cover, No. 3, A	60	251
New Methods of Meter-Pulse Registration	54	168
New North Sea 120-Circuit Submarine-Cable Systems	58	93
New Post Office Railway Station at the New Western District Office, The	59	12
New Post Office Speaking Clocks, The	56	1
New Power Plant for U.A.X. s No. 12 and 13—Power Plant No. 214, A	52	265
New Pulsing Relay—Post Office Relay Type 19, A	57	190
New Range of Ringing Converters for Subscribers' Apparatus	57	187
New Safety Belt for Overhead Work—Safety Belt No. 3	57	251
New Self-Contained Tree-Cutting Unit, A	57	164
New 700-Type Table Telephone—Telephone No. 706, The	52	1
New Signalling System for Divisions and Counts in the House of Commons, A	51	163
New Small Cordless P.M.B.X. Switchboard, A	54	22
New Status of the Technical Support Unit	59	18
New Submerged-Repeater Cable System Between England and Germany, The	57	109
New Switching and Transmission Plan for the Inland Trunk Network, A	53	75
New Telephone for Deaf Subscribers-Handset No. 4, A	53	24
New Test Jacks for Telephone Exchange Equipment	53	48
New Training Schemes for Post Office Engineering Youths	56	184
New Wall Telephone—Telephone No. 711, A	57	51
New Watch Receiver—Receiver, Watch, No. 8T, A	56	230
New Valves for Deep-Water Submerged Telephone-Repeaters	53	98
Next Steps, The	51	373
Ninety-Seven Years of Engineers-in-Chief	60	83
Ninth Plenary Conference of the Commission Mixté Internationale, Paris, October, 1964, The	57	259
Nippers, Induction Hardening of Diagonal-Cutting	53	247
Noise in Telephony and Television Channels, Equipment for the Measurement of Some Characteristics of the	55	231
Noise, The Principles and Possible Application of some Amplifiers of Low Intrinsic	52	212
Non-Director Automatic Telephone Exchanges, A Portable Equipment for Analysing Traffic at	52	176
Non-Director Exchanges, Call-Failure Detection Equipment: Interim Equipment for Director and	60	202
Non-Director Exchanges, The Supersession of U.A.X.s 13 by Small	57	117
Non-Director Satellite Telephone Exchanges, Subscriber Trunk Dialling at	55	86
Non-Director Telephone Exchanges, Local-Call Timing at	55	83
Non-Director Telephone Exchanges, Mobile	57	89
North Sea 120-Circuit Submarine-Cable Systems, New	58	93
Note on the Laying Effect and Aging of Submarine Telephone Cables, A	54	20
Novel Way of Providing a Cable Route Across a Busy and Congested Water-way, A	51	94

O

Observation Equipment, A Printing Recorder for Use with	53	118
Observation Equipment Using a Transistor-Controlled Motor-Uniselector, Central Service	54	9
Ohmmeter No. 18A, A Test Instrument with a Direct-Reading Fault Bride, –	60	285
Oil-Exploration Project, Communications for the North Sea.	58	160
On Programming Computers	55	125
On-Site Adjustment Checks of Telephone Exchange Equipment Installed by Contract	57	243
150-Foot Mast for Radio Stations, A	53	271
Ongar Radio Station, Extension of	53	158
Opening of the First Production Electronic Telephone Exchange at Ambergate	59	287
Opening of the Post Office Tower, London, The	58	223
Operation and Maintenance of Secondary-Cell Batteries	59	43
Optical Height-Measuring Instrument, An	54	250
Organisation, Changes in Post Office	60	123
Out-Band Signalling, Carrier Terminal Equipment, a Medium-Distance, Built-in (Parts 1 and 2)	52	122, 179
Out-of-Area Exchange Lines, A Voice-Frequency Signalling System for	60	259
Outlets from 2-Motion Selector Bank, A Tester for	53	196
Outline of Transistor Characteristics and Applications,		
Part 1—Transistor Parameters and Stabilization of Characteristics	56	122
Part 2—Application of Linear Characteristics	56	196
Part 3—Application of Non-Linear Characteristics	56	268
Over-Ceiling Cabling for Telephone Exchanges	54	82
Overhead Construction, Developments in	57	260
Overhead Work—Safety Belt No. 3, New Safety Belt for	57	251

P

P. A. B. Xs, An Introduction to Large Cordless	53	231
P. A. B. X. Installation, Application of Program Evaluation and Review Techniques to (Parts 1 and 2)	57	193, 269
P.A.B.X. No. 6, A Standard Unattended P.A.B.X.—	58	238
P.M.B.X. Switchboard, A New Small Cordless	54	22
P.M.B.X. Switchboards—P.M.B.X. s No. 2/3A and 2/4A, New Cordless	55	244
P.M.B.X. Switchboards, Panel-Mounted Cordless	58	23
PVR 800 High-Frequency (3-30 MHz) Radio Receiver, The	60	204
Pacific Telephone Cable System, Proposed Commonwealth	53	42
Packets, A Vertical Chain Conveyor for Letters and	54	273
Paint for Post Office Use, Examination and Evaluation of New types of	54	261
Paint Systems, Primers for	57	101
Panel-Mounted Cordless P.M.B.X. Switchboards	58	23
Parcel-Label Printing and Issuing Machines	52	218
Parcel-Sorting Office, The Mechanization of Leeds	54	151
Passenger Lifts in the Post Office Tower, London	58	228
Path Testing for Microwave Radio-Relay Links	58	26
Pay-on-Answer Coin-Box for Subscribers' Installations, A	54	176
Pay-on-Answer Coin-Box System, The	51	343
Payroll Computers, The London	52	142
Performance of the Datel Modem No. 1	52	250
Periodic Metering	51	320
Peterborough, The Field Trial of Two Small Electronic Exchanges at Leamington and	58	1
Photo-Electric Device for Measuring Cable Diameter During Extrusion, A	57	79
Photographing Subscribers' Meters	55	162
Physical Design of Subscriber-Trunk-Dialling Equipment	51	310
Pillars, A New Cross-Connexion Assembly for Cabinets and	53	254

	Vol.	Page
Pilot Signal, The Group Reference-	55	237
Pipe-Laying in Tidal Rivers and Harbour Crossings	56	166
Place of V.H.F., U.H.F., and S.H.F., Radio Links in a Developing Area, The	56	149
Plan Set N625, A Switching Unit for Use with 700-Type Telephones—	53	242
Plan Set N625, Wall, A Wall-Mounting Version of the Switching Unit for use with 700-Type Telephones—	57	224
Planning and Circuit Provision, Using a Computer for Main-Line	58	272
Planning and Works Aspects of 24-Circuit Pulse Code-Modulation Systems	60	33
Planning London's Future Telephone Network by Computer	59	167
Planning Telephone Plant for New Housing Estates	58	234
Plant on Bridges and Viaducts, Providing Post Office	58	54
Plastic Ducts by Moleplough, Laying	59	104
Plastic Telephone Cable Construction in the Tropics	53	162
Plastics in Cables	51	33
Plastics in Telecommunications Cables, London, April 1967, Conference on	60	121
Plastics Insulants due to Silver Migration, The Failure of	58	245
Plastics, The Testing of	56	280
Plenary Assembly of the C.C.I.R., Los Angeles, April 1959, The IXth	52	101
Pneumatic Cable Cutter, A	58	260
Pole-Erection Unit, The	60	93
Poles, A Boring Bit for Testing Wood	51	186
Poles for Telecommunication and Power Lines, The Joint Use of	55	31
Polyester Resin, Raising and Setting Manhole and Joint Box Frames and Covers Using	56	252
Polythene Cables in Subscriber's Local Line Networks, Field Trials of	56	8
Polythene-Insulated Coaxial Cables, The Jointing of	51	22
Polythene-Insulated Submarine-Cable Joints and Gland Mouldings, X-Ray Inspection of	60	280
Polythene-Insulated Submarine Coaxial Cables, Brazing and Moulding Equipment for Use on	57	82
Polythene-Sheathed Cables, A Moisture Barrier for	53	253
Polythene-Sheathed Paper-Core Unit-Twin Cable	56	32
Polythene-Sheathed Underground Telephone Cables	53	250
Portable Electric Power Equipment and Tools for External Engineering Work	57	226
Portable Emission Tester for Hot-Cathode Mercury Vapour Rectifiers, A	57	128
Portable Equipment for Analysing Traffic at Non-Director Automatic Telephone Exchanges, A	52	176
Post Office and Ministry of Works Research and Development Group, The Work of the Joint	52	251
Post Office and Satellite Communications, The	57	191
Post Office and the Supply of Electrical Energy by Statutory and Non-Statutory Undertakings in the United Kingdom, The	52	184
Post Office Datel Services, An Introduction to the	59	1
Post Office Engineering Department's Computer. Its User in Research, The	55	199
Post Office Engineering Department's Computer, The	56	133
Post Office Engineering Department, New Computing Facilities for the	58	38
Post Office Electrical Engineers' Journal, The (History 1908–1958)	51	4
Post Office Network of Radio-Relay Stations, The		
Part 1—Radio Relay Links and Network Planning	57	147
Part 2—Reliability, Performance and Maintenance	57	238
Post Office Organisation, Changes in	60	123
Post Office Relay Type 2D	60	168
Post Office Relay Type 18, A Remanent Relay—	57	100
Post Office Relay Type 19, A New Pulsing Relay—	57	190
Post Office Relays Type 14 and Type 15, Dry-Reed Relays—	58	46
Post Office Tower, A.C. Power Supplies to Museum Telephone Exchange and	58	169
Post Office Tower, London, and the United Kingdom Network of Microwave Links.	58	149
Post Office Tower, London, Passenger Lifts in the	58	228
Post Office Tower, London, The Opening of the	58	223
Post Office Type-2 Uniselector, Improvements to the	57	156
Post Office Type 4 Uniselector, The	52	215
Post Office Type 1 Ratchet Relay, The	53	154
Post Office Type 10 Relay, The	51	14
Post Office Type 12 Relay, The	57	27
Postal Engineering, Chain Conveyors in	51	53
Postal Self-Service Machines, Development of	52	272
Posters, Accident-Prevention	54	223
Power Equipment and Tools for External Engineering Works, Portable Electric	57	226
Power Lines, Protection of Exchange Equipment and Subscribers' Installations from Damage Due to Lightning and Contacts with	53	219
Power Plant No. 214, A New Power Plant for U. A. X. s No. 12 and 13—	52	265
Power Plants, Saving Space in Telephone Exchanges by Using Modern	56	23
Power Supplies to Museum Telephone Exchange and the Post Office Tower, A.C.	58	169
Power Units for Use at Subscribers'Premises	55	49
Practical Aspects of Providing Telephone Plant on New Housing Estates	59	241
Precision Magnetic Tape-Recorder, A	59	55
Preliminary Results of the Project TELSTAR Communication Satellite Demonstrations and Test: 10-27 July, 1962	55	147
Preservation of Cable Drums	56	44
Pressure and Temperature Transducers for Deep-Sea Measurements	60	133
Pressurization of Telecommunication Cables		
Part 1—Principles of Gas Pressurization	55	260
Part 2—The Supply of Dry Compressed Air	56	25
Part 3—Miscellaneous Pressurization Equipment	56	129
Part 4—The Operation of Gas-Pressure Systems and Fault Locating Techniques	56	170
Pressurization of the Trunk Cable Network, Effect on Service during 1962–63 of the	56	176
Preston, Installation of Letter-Sorting Machines at	58	271
Primers for Paint Systems	57	101
Principles and Possible Application of some Amplifiers of Low Intrinsic Noise, The	52	212
Principles of Negative-Impedance Convertors and the Development of a Negative-Impedance 2-Wire Repeater, The	51	206
Printed Circuit Boards, Connexions to	57	22
Printed Circuits and their Application to Telecommunications, An Introduction to	52	170
Printing Recorder for Use with Observation Equipment, A	53	118
Private Telephone Circuits for Commercial Renters, Long-Distance	55	187
Processing Mail, Mechanization of the Initial Stages of (Parts 1 and 2)	52	286
	53	12
Production of Silicon Planar Transistors, A Clean Room for the	59	34
Program Circuits, Transistor Line Amplifiers for Speech and	54	238
Program Evaluation and Review Techniques to P.A.B.X. Installation, Application of (Parts 1 and 2)	57	193, 269
Programmed Learning—A New Design for Training		
Part 1—An Introduction to Programmed Learning	60	253
Programming Computers, On	55	125
Progress in the Provision of Subscriber Trunk Dialling	55	36
Progressive Development of Routiners for Automatic Telephone Exchanges, The	60	118
Propane Gas as a Fuel for Small Internal-Combustion Engines	54	265
Proposed Commonwealth Pacific Telephone Cable System	53	42
Proposed New Cable System Direct to U.S.A.— TAT-3, A	53	169
Prospects for Transatlantic Television by Cable	52	136
Protection of Exchange Equipment and Subscribers' Installations from Damage Due to Lightning and Contacts with Power Lines	53	219
Protection Scheme, A Joint-User Cathodic	54	95
Prototype Conference Repeater Using a New Voice-Switching Technique	59	246
Providing Post Office Plant on Bridges and Viaducts	58	54
Providing Telephone Plant on New Housing Estates, Practical Aspects of	59	241
Public Utility Street Works Act, 1950: Calculation of Benefit by Deferment of Renewal Allowance	60	19
Pulse-Code Modulation		
Part 1—An Introduction to Pulse-Code Modulation	54	86
Part 2—An Experimental 12-channel Equipment	54	189

	Vol.	Page
Pulse-Code-Modulation Systems, Development of	59	10
Pulse-Code-Modulation Systems, Planning and Works Aspects of 24-Circuit	60	33
Pulse-Duration Analyser, An Electronic	51	64
Pulse-Generating and Tariff-Control Equipment for Periodic Metering	51	324
Pulse Registration, New Methods of Meter	54	168
Pulses for the Automatic Telex Service, Generation of Meter	52	196
Pulsing and Ringing Machine for U.A.X.s, A	53	87
Push-Button Telephones Market-Research Trial, Subscriber	52	200
Push-Button Torn-Tape Relay System for Electra House, London, A	57	175

Q

Quality Control 11th Annual Conference, London, June 1967, European Organization for	60	226
Quality Control of Brazed Seals in Deep-Sea Repeaters	60	44
Quality of Service on Trunk Routes, Measuring	60	227

R

Radio Astronomy, Washington, D.C., March 1962, The Interim Meeting of C.C.I.R. Study Group IV—Space Systems and	55	96
Radio Circuits, Dialling into the United Kingdom Telex Network over Long Distance	56	162
Radio Conference, Geneva, 7 October—8 November, 1963, The Extraordinary	56	251
Radio Conference, Geneva, 17 August to 21 December, 1959, The Administrative	53	53
Radio-Control Station, Baldock	58	86
Radio-Frequency Broad-Band Transformers, High-Power	51	8
Radio (G.B.R.) Time Signals by an Electronic Clock, Automatic Control of the Rugby	53	193
Radio Interference		
Part 1—Introduction	50	226
Part 2—The Post Office Radio Interference Service	50	227
Part 3—Suppression	51	40
Part 4—Measuring Equipment	51	115
Part 5—Industrial Scientific and Medical Apparatus and Radiating Receivers	51	202
Part 6—The Control of Radio Interference	52	43
Radio Investigation Work, A Vehicle for	53	34
Radio Links in a Developing Area, The Place of V.H.F., U.H.F., and S.H.F.	56	149
Radio Links, Teleprinting over Long-Distance (Parts 1 and 2)	51	88, 219
Radio Planning and Provision Branch Exhibitions at 2-12 Gresham Street, London W C 2., Inland	56	244
Radio Receiver, The PVR 800 High-Frequency (3-30 MHz)	60	204
Radio Receivers, A New Detection System for Television and V.H.F.	55	219
Radio-Relay Links, Path Testing for Microwave	58	26
Radio-Relay Stations, The Post Office Network of (Parts 1 and 2)	57	147, 238
Radio Services, Monitoring Station for Mobile-	55	228
Radio Services, Narrower-Frequency-Band Channels for V.H.F. Land Mobile.	55	192
Radio Station, Anthorn Very-Low Frequency	58	114
Radio Station, Dismantling the Long-Wave Masts at Leafield	55	129
Radio Station, Extension of Ongar	53	158
Radio Station, Felling of Latticed Steel Masts at Somerton	53	274
Radio Station, The Helium System of the Maser Installation at Goonhilly	56	29
Radio Station, The New Leafield (Parts 1-5)	50	130, 178, 196, 267, 283
Radio Stations, A 150-Foot Mast for	53	271
Radio Stations, External Practices at Post Office	58	77
Radio Stations, New Coast	53	170
Radio-Telegraph Automatic Error-Correcting Equipment, Testing	54	245
Radio-Telegraph Circuits, A Monitor for 7-Unit Synchronous Error-Correcting Systems for Use on	53	1
Radio-Telegraph Multiplex System, An Automatic Error-Correcting	60	187
Radio Telegraph Services, Frequency-Modulated Voice-Frequency Telegraph Systems for Radio Telegraph Services	53	21
Radio Telegraph Services, Improvements in Automatic Error Correction Equipment Used on H.F.	55	253
Radio-Telegraph Systems, A Transistor-Type Self-Synchronizing 7 Unit Monitor for Automatic Error Correcting	57	37
Radio-Telegraph Systems, Laboratory Test Equipment for Synchronous Regenerative	52	276
Radio-Telephone Circuits, The Lincompex System For the Improvement of	59	163
Radio Tower, Birmingham	58	182
Radio Tower, Museum	55	73
Radio Towers, Reinforced Concrete	58	178
Radio Transmitters, A Signal Generator for Testing Band 7 (H.F.)	53	160
Radio Transmitters, Cooling System for High-Power	55	40
Radiophone Service, The London	59	98
Radiophone Service, The South Lancashire	52	253
Railway Electrification on Post Office Circuits, Effect of	53	184
Railway Station at the New Western District Office, The New Post Office	59	12
Raising and Setting Manhole and Joint-Box Frames and Covers Using Polyester Resin	56	252
Ratchet Relay No. 2	60	97
Ratchet Relay, The Post Office Type 1	53	154
Reader for Use with Automatic Letter-Sorting Machines, Coding Desk and Code-Mark	54	122
Receiver for Direct-Pick-Up Television Links, A	53	239
Receiver, The P.V.R. 800 High Frequency (3-30 MHz) Radio	60	204
Receiver, Watch, No. 8T, A New Watch Receiver—	56	230
Receivers, A New Detection System for Television and V.H.F. Radio	55	219
Receivers, A Transistor Hearing Aid for Bone Conduction	57	86
Recent Changes to Telephone Exchange Equipment Engineering and Installation Methods	60	59
Recent Developments in Automatic Telephone Exchange Trunking	54	157
Recent Improvements in the Inking System of a Recording Decibelmeter	52	26
Recorder, A Precision Magnetic Tape—	59	55
Recorder, A Time-Interval	55	186
Recorder Charts, An Automatic Analyser for	58	257
Recorder for Use with Observation Equipment, A Printing	53	118
Recorder No. 1B, Fault	55	185
Recording and Control of Information-Service Announcements	55	158
Recording Decibelmeter, Recent Improvements in the Inking System of a	52	26
Recording Decibelmeters	51	145
Recording Equipment for the Frequency Range 50 kc/s–8 Mc/s, An Insertion-Loss Display and	53	145
Recovered Stores, The Inspection and Subsequent Treatment of	52	295
Reed Relays for Exchange Systems, Electronic Telephone Exchanges:	60	140
Reed Relays in the Small Electronic Exchange Systems at Leamington and Peterborough	58	52
Reed-Selector System Field Trial at Belgravia Exchange, London, Electronic Telephone Exchanges:	60	293
Reference-Pilot Signal, The Group	55	237
Reflectometers	54	37
Regenerators, A Tester for Pulse	51	100
Register for Director Exchanges, Local	51	301
Register Signalling Systems for Dialling over Transoceanic Telephone Cables, Line and	56	111
Register-Translator, Design Features of the Lee Green Magnetic-Drum	51	137
Register-Translator, Flood-Testing of the Magnetic-Drum	54	259
Register-Translator for Director Areas, Incoming	51	303
Register Translator for Director Areas, Incoming Core-Type (Parts 1 and 2)	59	119, 183
Register-Translators, Controlling (Parts 1–4)	51	268, 272, 280, 291
Register-Translators, Maintenance of Electronic	57	167
Reinforced-Concrete Radio Towers	58	178
Relay, No. 2, Ratchet	60	97
Relay-Spring Contacts, Renewal of	52	211
Relay Switching Circuits, The Use of Transistors in Conjunction with	57	199
Relay, The Post Office Type 1 Ratchet	53	154

	Vol.	Page
Relay, The Post Office Type 10	51	14
Relay, The Post Office Type 12	57	27
Relay Type 2D, Post Office	60	168
Relay Type 18, A Remanent Relay—Post Office	57	100
Relay Type 19, A New Pulsing Relay—Post Office	57	190
Relays, A Device to Replace Conventional Polarized	59	181
Relays for Exchange Systems, Electronic Telephone Exchanges: Reed	60	140
Relays Type 14 and Type 15, Dry-Reed Relays—Post Office	58	46
Reliability and Maintenance of Electronic Register-Translators	57	167
Reliability, Electrolytic Capacitors and Their	55	115
Reliability in Post Office Equipment, Component	54	40
Reliability Studies on Silicon Planar Transistors, Some	57	122
Remanent Relay—Post Office Relay Type 18, A	57	100
Remote-Control Systems for County Fire Brigades	57	233
Renewal of Relay-Spring Contacts	52	211
Repair Benches, The Lighting of Telephone Apparatus	54	274
Repair of Faulty Loading Pots, The	59	5
Repair of Shallow-Water Submerged Repeaters, The	53	9
Repeater Cable System Between England and Germany, The New Submerged-	57	109
Repeater Equipment Underground, Housing of	56	158
Repeater Faults on Submarine Telephones Cables, Location of	54	252
Repeater, Replacement of the Worlds First Traffic-Carrying Submerged	58	32
Repeater Station Testing Methods and Equipment	52	290
Repeater Submarine Cables, A Fault-Location Test Set for	58	262
Repeater System, A 12 Mc/s Submerged-	59	199
Repeater, The Principles of Negative-Impedance Convertors and the Development of a Negative-Impedance	51	206
Repeater Using a New Voice-Switching Technique, A Prototype Conference	59	246
Repeaters, A Differential Gain Monitoring Panel for Testing Submerged Telephone	51	132
Repeaters, Components and Materials for Submarine	57	158
Repeaters, New Valves for Deep-Water Submerged Telephone-	53	98
Repeaters, Quality Control of Brazed Seals in Deep-Sea	60	44
Repeaters, St Margarets Bay—La Panne 420-circuit Submarine-Cable System with Transistor-Type Submerged	60	1
Repeaters, The Repair of Shallow-Water Submerged	53	9
Repeaters, Twenty One Years of Submarine	57	46
Repertory Diallers, Field Trial of	58	124
Replacement of the World's First Traffic Carrying Submerged Repeater	58	32
Resistance-Brazing and Moulding Equipment for Use on Polythene-Insulated Submarine Coaxial Cables	57	82
Resonance Isolator for Use at 4,000 Mc/s, A	52	69
Review of Developments, Electronic Telephone Exchanges. An Introductory	59	211
Ringing Converters for Subscribers' Apparatus, A New Range of	57	187
Ringing Machine for U.A.X.s, A Pulsing and	53	87
Risers, Improved Type of Corrugated Band for Twin-Band	58	164
Rivers and Harbour Crossings, Pipe-Laying in	56	166
Routiners, A Transportable Fault-Recorder for Automatic Exchange:	57	197
Routiners for Automatic Telephone Exchanges, The Progressive Development of	60	118
Rugby Radio (GBR) Time Signals by an Electronic Clock, Automatic Control of the	53	193

S

	Vol.	Page
S. H. F. Radio Links in a Developing Area, The Place of V. H. F., U. H. F., and	56	149
SI Units, The International System of Units—	58	265
Safety Belt No. 3, New Safety Belt for Overhead Work—	57	251
St Margaret's Bay—La Panne 420-Circuit Submarine-Cable System with Transistor-Type Submerged Repeaters	60	1
Satellite HS-303 Early Bird, The Launch of the Communications	58	125
Satellite Communication Systems	55	97
Satellite Communication, The Post Office and	57	191
Satellite Communications	55	145
Satellite, Customer Response to Telephone Circuits Routed via a Synchronous-Orbit	60	181
Satellite Demonstrations and Tests: 10-27 July, 1962, Preliminary Results of the Project TELSTAR Communication	55	147
Satellite Ground Station, Goonhilly Downs, Cornwall, Equipment and Testing Facilities at the Experimental	55	105
Satellite Project, The HS-303 Communications	57	221
Satellite, Signal Transmission Across the Atlantic via a Passive Earth	53	270
Satellite Telephone Exchanges, Subscriber Trunk Dialling at Non-Director	55	86
Satellites, Large Steerable Microwave Aerials for Communication with Artificial Earth	55	152
Saving Space in Telephone Exchanges by Using Modern Power Plants	56	23
SCOTICE/ICECAN Submarine Cable Projects, The	53	56
SCOTICE—The United Kingdom to Iceland Cable System	55	38
Screw-Sorting Machine, An Automatic	57	32
Second Plenary Assembly of the International Telegraph and Telephone Consultative Committee (C. C. I. T. T.), New Delhi, December 1960	54	130
Secondary-Cell Batteries, Operation and Maintenance of	59	43
Selective Tray Conveyor at the Accountant General's Department Chesterfield, The	57	254
Selective Voice-Frequency Signalling for Motorway Emergency Telephone System	55	181
Selector Bank, A Tester for Outlets from 2-Motion	53	196
Selector, The 4,000-Type	51	168
Self-Service Machines, Development of Postal	52	272
Self-Tuning Insertion-Loss Measuring Equipment (10 kc/s–1.5 Mc/s), A	52	280
Semi-Automatic Operation of Transoceanic Telephone-Cable Circuits, Switching Arrangements for	56	105
Semiconductor Device Developments: General's Introduction	59	202
Semiconductor Device Developments: Integrated Circuits.		
Part 1—Construction, Properties and Applications	60	20
Part 2—Standard Logic Circuits	60	110
Seminar on 'The Telephone Service', London, September 1966, I. T. U.	59	282
Serial-Numbering Transmitter, An Electronic Telegraph	55	195
Service-Observation Equipment Using a Transistor-Controlled Motor-Uniselector, Central	54	9
Service on Trunk Routes, Measuring Quality of	60	227
700-Type Table Telephone—Telephone No. 706, The New	52	1
700-Type Telephone Handset Providing Lamp calling Signals—Handset No. 7, A	58	250
700-Type Telephone, Standardization and Control of Colour for the	56	247
700-Type Telephones—Plan Set N625, A Switching Unit for Use with	53	242
700-Type Telephones—Plan-Set N625, Wall, A Wall Mounting Version of the Switching Unit for Use with	57	224
Sheath Jointing of Plastic-Sheathed Cables	59	206
Ships, Data Service to	58	106
Short History of Codes of Practice for the Opening and Restoration of Trenches in Public Streets, A	51	108
Signal Generator for Testing Band 7 (H. F.) Radio Transmitters, A	53	160
Signal Transmission Across the Atlantic via a Passive Earth Satellite	53	270
Signalling and Switching Aspects of the Trunk Transit Network, The	60	165
Signalling Arrangements for Dialling over the Transatlantic Telephone Cables	53	201
Signalling, Carrier Terminal Equipment, A Medium-Distance, Built-in Out-Band (Parts 1 and 2)	52	122, 179
Signalling for Motorway Emergency Telephone Systems, Selective Voice-Frequency	55	181
Signalling System A.C. No. 9	55	51
Signalling System for Out-of-Area Exchange Lines, A Voice-Frequency	60	259

	Vol.	Page
Signalling System, Frequency-Generating Equipment for the Transoceanic Line-	56	119
Signalling Systems, A Calibrated Signal Generator and Measuring Apparatus for International	51	180
Signalling System for Dialling over Transoceanic Telephone Cables, Line and Register	56	111
Signalling Techniques for the Intercontinental Automatic Telex Service, Switching and (Parts 1 and 2)	60	210, 266
Silicon-Device Manufacture, The Use of X-Ray Diffraction to Study Defects Occurring in	59	94
Silicon Planar Transistors, Design and Technology of	56	239
Silver Migration, The Failure of Plastics Insulants Due to	58	245
Simple Sum of Squares Electronic Calculator, A	56	6
Simplified House Exchange System–House Exchange System No. 3, A	56	15
Simulation of a Character-Recognition Machine, Computer (Parts 1 and 2)	60	39, 104
Single-Operator Letter-Sorting Machine		
Part 1–Introduction and the Experimental Machine	51	104
Part 2–The Production Machine and Future Development	51	188
625-Line Colour Standards, A Television-Network Switching Equipment to	60	199
625-Line Monochrome and Colour Television Transmission Systems, Testing (Parts 1 and 2)	58	126, 165
Small-Diameter Coaxial-Cable Developments	57	1
Small Hand-Operated Hydraulic Thrust-Borer, A	56	192
Soft-Soldering to Gold-Plated Surfaces	58	268
Soldering to Gold-Plated Surfaces, Soft-	58	268
Solderless Wrapped Joints in Telephone Exchanges	54	204
Some Aspects of Data Transmission	57	264
Some Reliability Studies On Silicon Planar Transistors	57	122
Somerton Radio Station, Felling of Latticed Steel Masts at	53	274
Sorting Machines, A Code Translator for Letter-	52	199
Sorting Machines, Use of Phosphorescent Code Marks in Automatic Letter-Facing and	54	180
Sorting Offices, Tape-Recording Machine for Ticking-in Mails at	56	118
Sorting Techniques for Automatic Computers	53	181
South Lancashire Radiophone Service, The	52	253
Space Systems and Radio Astronomy, Washington, D. C., March 1962, The Interium Meeting of C.C.I.R. Study Group IV–	55	96
Speaker Equipment for Submarine Cable Systems	54	118
Speaking Clocks, The New Post Office	56	1
Special Lighting for Motor-Transport Workshops	58	107
Spectrum Analyser for the Frequency Range 25-140 Mc/s, A	54	179
Speech and Program Circuits, Transistor Line Amplifiers for	54	238
Speech Compandor Using Junction Transistor, A	55	14
Speech Voltmeter Type 5A, The Electronic	53	92
Staff Comfort, Engineering Aspects of	59	26
Stafford Cordless Switchboard	54	201
Standard Unattended P.A.B.X.–P.A.B.X. No. 6, A	58	238
Standardization and Control of Colour for the 700-Type Telephone	56	247
Station at the New Western District Office, The New Post Office Railway	59	12
Statistical Data Concerning Subscriber-Dialled Trunk Calls, Equipment for the Provision of	53	127
Status of the Technical Support Unit, New	59	18
Statutory and Non-Statutory Undertakings in the United Kingdom, The Post Office and the Supply of Electrical Energy by	52	184
Stay Anchorages	59	53
Stores, The Inspection and Subsequent Treatment Telegraph Buffer	56	262
Stores, The Inspection and Subsequent Treatment of Recovered	52	295
Submarine-Cable Earth-Electrode Systems	57	105
Submarine-Cable Joints and Gland Mouldings, X-Ray Inspection of Polythene-Insulated	60	280
Submarine Cable Projects, The SCOTICE/ICECAN	53	56
Submarine-Cable System with Transistor-Type Submerged Repeaters, St Margaret's Bay–La Panne 420-circuit	60	1
Submarine-Cable Systems, New North Sea 120-Circuit	58	93
Submarine Cable Systems, Speaker Equipment for	54	118
Submarine Cables, A Cable-Fault Locator for	55	8
Submarine Cables, A Fault-Location Test Set for Repeater	58	262
Submarine Coaxial Cables, Resistance-Brazing and Moulding Equipment for Use on Polythene-Insulated	57	82
Submarine Repeaters, Components and Materials for	57	158
Submarine Repeaters, Twenty One Years of	57	46
Submarine Telephone Cable System to Canada, CANTAT–A New	54	220
Submarine Telephone Cable, The Anglo-Swedish	53	165
Submarine Telephone Cables, Increasing the Traffic Capacity of Transatlantic and Other	52	140
Submarine Telephone Cables, Location of Repeater Faults on	54	252
Submarine Telephone Cables, Synchronous Multiplex Telegraphy on Intercontinental	60	52
Submerged-Repeater Cable System Between England and Germany, The New	57	109
Submerged Repeater, Replacement of the Worlds First Traffic Carrying	58	32
Submerged Repeater System, A 12 Mc/s	59	199
Submerged Repeaters, Equalizers and Associated Terminal Equipment, Anglo-Canadian Transatlantic Telephone Cable (CANTAT):	56	76
Submerged Repeaters, St Margarets Bay–La Panne 420-circuit Submarine-Cable System with Transistor-Type	60	1
Submerged Repeaters, The Repair of Shallow-Water	53	9
Submerged Telephone-Repeaters, New Valves for Deep-Water	53	98
Subscriber-Controlled Transfer Service	55	275
Subscriber-Dialled Trunk Calls, Equipment for the Provision of Statistical Data Concerning	53	127
Subscriber Dialling from the London Director Area to Paris, Introduction of	56	33
Subscriber Dialling of Calls to Europe, Switching Arrangements for International	57	75
Subscriber Dialling of International Telex Calls	54	103
Subscriber Push-Button Telephones Market-Research Trial	59	200
Subscriber Trunk Dialling at Non-Director Satellite Telephones Exchanges	55	86
Subscriber Trunk Dialling at Unit Automatic Exchanges, The Introduction of	59	20
Subscriber-Trunk-Dialling Equipment, Physical Design of	51	310
Subscriber Trunk Dialling for U.A.X. Subscribers	56	21
Subscriber Trunk Dialling. Inauguration by Her Majesty the Queen	51	257
Subscriber-Trunk-Dialling Installation at Bristol, The First	51	360
Subscriber Trunk Dialling, Layout of Charging Groups and Rearrangement of Line Plant and Switching Equipment for	51	353
Subscriber Trunk Dialling, Maintenance Aspects of	51	369
Subscriber Trunk Dialling Number. Foreword	51	255
Subscriber Trunk Dialling, Progress in the Provision of	55	36
Subscriber Trunk Dialling, The First Months of	52	144
Subscriber Trunk Dialling, The General Plan for	51	258
Subscribers, A Calling Aid for Disabled	54	233
Subscribers' Apparatus, A New Range of Ringing Converters for	57	187
Subscribers' Apparatus and Associated Equipment at 2–12 Gresham Street, London, E.C.2, Exhibition of	53	265
Subscribers' 50-Point Linefinder System	51	81
Subscribers' Installations, A Pay-on-Answer Coin-Box for	54	176
Subscribers' Line Connectors	52	237
Subscribers' Lines and Apparatus, An Automatic Tester for	51	120
Subscribers' Local-Line Networks, Field Trial of Large Polythene Cables in	56	8
Subscribers' Premises, Power Units for Use at	55	49
Subscribers' Private Meter Equipment	51	338
Subscribers with Weak Voices, A Telephone for	54	242
Sum-of-Squares Electronic Calculator, A Simple	56	6
Supergroup Derivation Equipment	54	196
Supersession of U.A.X.S 13 by Small Non-Director Exchanges, The	57	117
Supply of Electrical Energy by Statutory and Non-Statutory Undertakings in the United Kingdom, The Post Office and the	52	184
Surge-Resistant Fuses, A Tester for	54	262
Swedish Submarine Telephone Cable, The Anglo-	53	165
Swept-Frequency Method of Locating Faults in Waveguide Aerial Feeders, A	54	27
Switchboard, A Cordless Telex	57	110
Switchboard, A New Small Cordless P.M.B.X.	54	22
Switchboard–P.M.B.X.s No. 2/3A and 2/4A, New Cordless P.M.B.X.	55	244

	Vol.	Page
Switchboard, Panel-Mounted Cordless PMBX	58	23
Switchboard, Stafford Cordless	54	201
Switchboards, The 4-Wire Extension Principle for Small Cordless P.M.B.X.	53	167
Switching, An Electronic Clock for Television Network	53	108
Switching and Signalling Techniques for the Intercontinental Telex Service		
Part 1—Type C Signalling	60	210
Part 2—London (Fleet) Intercontinental Telex Exchange	60	266
Switching and Transmission Plan for the Inland Trunk Network, A New	53	75
Switching Arrangements for International Subscriber Dialling of Calls to Europe	57	75
Switching Arrangements for Semi-Automatic Operation of Transoceanic Telephone-Cable Circuits	56	105
Switching Aspects of the Trunk Transit Network, The Signalling and	60	165
Switching Centres Using BXB 1121 Crossbar Equipment, Transit (Part 1)	60	302
Switching Equipment for Subscriber Trunk Dialling, Layout of Charging Groups and Rearrangement of Line Plant and	51	353
Switching Equipment to 625-Line Colour Standards, A Television-Network	60	199
Switching Equipment, Voltage-Margin Testing of Telegraph Electronic	53	173
Switching Mechanisms, The Use of Fault-History Records for the Maintenance of Telephone	58	19
Switching Network Design, Electronic Telephone Exchanges: An Introduction to	60	124
Switching of Inland Carrier—Link Sections of Transatlantic Telephone Cable Systems, Automatic	56	237
Switching of Television Circuits in London, The	53	102
Switching System, Telegraph Distortion in the Trunk Network of the Telegraph Automatic	52	103
Switching System, The 5005-Crossbar Telephone-Exchange (Parts 1 and 2)	59	170, 271
Switching Systems, Cyclic-Pulse	51	46
Switching Unit for Use with 700-Type Telephones—Plan-Set N625, A	53	242
Switching Unit for Use with 700-Type Telephones—Plan-Set N625, Wall, A Wall-Mounting Version of the	57	224
Switching Units, Emergency Mobile Teleprinter Automatic	53	268
Symposium on Data Transmission, Delft, 1960, International	53	260
Symposium on Electronic Data Processing, London, October 1961, Electronic Computer Exhibition and	54	257
Synchronous Multiplex Telegraphy on Intercontinental Submarine Telephone Cables	60	52
Synchronous Regenerative Radio-Telegraph Systems, Laboratory Test Equipment for	52	276
Systems in Telecommunications, Men, Circuits and	60	241
12 Mc/s Coaxial Line Equipment—C.E.L. No. 8A, A	54	73

T

(T.A.S.I.), Time Assignment Speech Interpolation	53	197
TAT-1 Plus Ten Years, Transatlantic Telephone Cable	60	195
TAT-3, A Proposed New Cable System Direct to U.S.A.—	53	169
Table Telephone with Four Push-Button Keys—Telephone No. 710, A	53	190
Tandem Telephone Exchanges, Decentralization of London's Trunk and	59	75
Tape-Recorder, A Precision Magnetic	59	55
Tape-Recording Machine for Ticking-in Mails at Sorting Offices	56	118
Tape-Relay Network, A Concentrator for a Telegraph	55	250
Tapes, The Cold Rolling of Very Thin Ferrous	54	51
Tariff-Control Equipment for Periodic Metering, Pulse-Generating and	51	324
Technical Support Unit, New Status of the	59	18
Telecommunications, Men, Circuits and Systems in	60	241
Telegraph Automatic Switching System, Telegraph Distortion in the Trunk Network of the	52	103
Telegraph Buffer Store Using a Magnetic Drum, An Electronic	56	262
Telegraph Circuits, Detection of Errors in Data Transmission on 50-Baud	58	194
Telegraph Distortion in the Trunk Network of the Telegraph Automatic Switching System	52	103
Telegraph Distortion on Physical (D.C.) Lines and Telegraph Machines	52	61
Telegraph Machines, Telegraph Distortion on Physical (D.C.) Lines and	52	61
Telegraph Multiplex System, An Automatic Error—Correcting Radio-	60	187
Telegraph Serial-Numbering Transmitter, An Electronic	55	195
Telegraph Services, Improvements in Automatic Error-Correction Equipment Used on H.F. Radio	55	253
Telegraph System, A Wideband Multi-Channel Voice-Frequency	60	10
Telegraph System Using Transistors, A Multi-Channel Voice-Frequency	57	95
Telegraph Systems, A Transistor-Type Self-Synchronizing 7-Unit Monitor for Automatic Error-Correcting Radio-	57	37
Telegraph Systems for Radio Telegraph Services, Frequency-Modulated Voice-Frequency	53	21
Telegraph Tape-Relay Network, A Concentrator for a	55	250
Telegraphy on Intercontinental Submarine Telephone Cables, Synchronous Multiplex	60	52
Telegraphy on the Transatlantic Telephone Cable, Time-Division-Multiplex	54	113
Telephone Calls by United Kingdom Subscribers, Dialling of International Trunk	54	92
Telephone Circuits in Relation to Data Transmission, The Characteristics of	59	151
Telephone Circuits Routed Via a Synchronous-Orbit Satellite, Customer Response to	60	181
Telephone Cords, The Use of Modern Materials for	53	175
Telephone Equipment Connexions	55	166
Telephone Exchange and The Post Office Tower, A.C. Power Supplies to Museum	58	169
Telephone Exchange at Ambergate, Opening of the First Production Electronic	59	287
Telephone Exchange Design, The Unit Method of Automatic	54	14
Telephone Exchange Equipment Engineering and Installation Methods, Recent Changes to	60	59
Telephone Exchange Equipment Installed by Contract, On site Adjustment Checks of	57	243
Telephone Exchange Equipment, New Test Jacks for	53	48
Telephone Exchange Main Distribution Frame, The	53	226
Telephone-Exchange Switching System, The 5005 Crossbar (Parts 1 and 2).	59	170, 271
Telephone Exchange, The Highgate Wood Electronic	55	265
Telephone Exchange, The Leighton Buzzard Electronic	59	255
Telephone Exchange Trunking, Recent Developments in Automatic	54	157
Telephone Exchanges, A Portable Equipment for Analysing Traffic at Non-Director Automatic	52	176
Telephone Exchanges: An Introduction to Switching Network Design, Electronic	60	124
Telephone Exchanges: An Introductory Review of Developments, Electronic	59	211
Telephone Exchanges by Using Modern Power Plants, Saving Space in	56	23
Telephone Exchanges, Calculation of Current Values for Determining Bus-Bar Sizes in Automatic	57	15
Telephone Exchanges: Component Selection and Mode of Operation, Electronic	59	233
Telephone Exchanges, Decentralization of London's Trunk and Tandem	59	75
Telephone Exchanges, I.E.E. Conference on Electronic	53	235
Telephone Exchanges, Improvements in Installation Methods for	55	92
Telephone Exchanges, Local-Call Timing at Non-Director	55	83
Telephone Exchanges, Mobile Non-Director	57	89
Telephone Exchanges: Reed Relays for Exchange Systems, Electronic	60	140
Telephone Exchanges: Reed Selector System Field Trial at Belgravia Exchange, London., Electronic	60	293
Telephone Exchanges, Subscriber Trunk Dialling at Non-Director Satellite	55	86
Telephone Exchanges, Testing Facilities on Test Desks in Automatic	53	275
Telephone Exchanges, The Progressive Development of Routiners for Automatic	60	118

	Vol.	Page
Telephone Feet, Development of a Non-Staining Material for	54	100
Telephone for Subscribers with Weak Voices, A	54	242
Telephone—Loudspeaking-Telephone No. 3., A Waterproof Loudspeaking	55	6
Telephone Network 1952–62, A Decade of Growth in the Trunk	56	177
Telephone No. 706, The New 700-Type Table Telephone—	52	1
Telephone No. 710, A Table Telephone with Four Push Button Keys—	53	190
Telephone No. 711, A New Wall Telephone—	57	51
Telephone No. 712, Field Trial of the Trimphone—	58	8
Telephone Numbers, All-Figure	59	40
Telephone Plant for New Housing Estates, Planning	58	234
Telephone Plant on New Housing Estates, Practical Aspects of Providing	59	241
Telephone, Standardization and Control of Colour for the 700-Type	56	247
Telephone Subscribers, An Answering Set for	53	45
Telephone Switching Mechanisms, The Use of Fault-History Records for the Maintenance of	58	19
Telephone Systems, Selective Voice-Frequency Signalling for Motorway Emergency	55	181
Telephone Traffic Engineering, The Use of Electronic Digital Computers for	58	203
Telephone, Trial of a New Type of Wall	53	55
Telephone with an Intrinsically Safe Handset, A New Flameproof Table	54	234
Telephone without Voice Switching—Loudspeaking-Telephone No. 1, A Loudspeaking	54	1
Telephones Market Research Trial, Subscriber Push Button	59	200
Telephones—Plan Set N625, A Switching Unit for the Use with 700-Type	53	242
Telephones, The Cleansing of	57	131
Telephony and Television Channels, Equipment for the Measurement of Some Characteristics of the Noise in	55	231
Telephony, Human Factors in	60	174
Teleprinter Automatic Switching Units, Emergency Mobile	53	268
Teleprinter No. 7, Improvements in the	55	240
Teleprinting Over Long-Distance Radio Links		
Part 1—General Methods of Radio Telegraphy	51	88
Part 2—Automatic Error-Correcting Methods Used over Long-Distance Radio Links	51	219
Teletraffic Congress, London, 1964. The Fourth International	57	205
Television and V.H.F. Receivers, A New Detection System for	55	219
Television By Cable, Prospects for Transatlantic	52	136
Television Channels, Equipment for the Measurement of some Characteristics of the Noise in Telephony and	55	231
Television Circuits in London, The Switching of	53	102
Television, Closed-Circuit Colour	53	277
Television Links, A Receiver for Direct-Pick-up	53	239
Television Links, Waveform Distortion in (Parts 1 and 2)	52	108, 188
Television Network Switching, An Electronic Clock for	53	108
Television-Network Switching Equipment to 625-Line Colour Standards	60	199
Television Networks, Testing Facilities and Methods for the 405-Line	56	275
Television Transmission Systems, Testing 625-Line Monochrome and Colour (Parts 1 and 2)	58	126, 165
Telex Calls, Subscriber Dialling of International	54	103
Telex Engineering Control, The London	51	58
Telex Exchange, Fleet (London), Automatic	54	53
Telex Network over Long-Distance Radio Circuits, Dialling into the United Kingdom	56	162
Telex Service, Automatic Switching for the	51	193
Telex Service, Generation of Meter Pulses for the Automatic	52	196
Telex Service, Switching and Signalling Technique for the Intercontinental Automatic (Parts 1 and 2)	60	210, 266
Telex Switchboard, A Cordless	57	110
TELSTAR Communication Satellite Demonstrations and Tests: 10-27 July, 1962, Preliminary Results of the Project	55	147
Temperature Tests for Transmission Equipment Located in Footway Joint-Boxes	56	160
Temperature Transducers for Deep-Sea Measurements, Pressure and	60	133
Tents, Jointers', No. 3 and 4, New Jointers' Tents—	59	52
Test-Desk, Testing of Subscribers' Dials from the	54	58
Test-Desks in Automatic Telephone Exchanges, Testing Facilities on	53	275
Test-Desks, Wheatstone Bridge Circuit for	53	205
Test Equipment for the Datel Services—Datel Testers No 1A, 2A and 2B	59	262
Test Instrument with a Direct-Reading Fault Bridge—Ohmmeter No. 18A, A	60	285
Test Jack for Telephone Exchange Equipment, New	53	48
Test Set for Repeatered Submarine Cables, A Fault-Location	58	262
Tester for Hot-Cathode Mercury-Vapour Rectifiers, A Portable	57	128
Tester for Outlets from 2-Motion Selector Bank, A	53	196
Tester for Pulse Regenerators, A	51	100
Tester for Subscribers' Lines and Apparatus, An Automatic	51	120
Tester for Surge-Resistant Fuses, A	54	262
Tester for the Coin and Fee Checking Relay-Set	54	230
Testing Band 7 (H.F.) Radio Transmitters, A Signal Generator for	53	160
Testing Facilities and Methods for the 405-Line Television Network	56	275
Testing Facilities at the Experimental Satellite Ground Station, Goonhilly Downs, Cornwall	55	105
Testing Facilities on Test-Desks in Automatic Telephone Exchanges	53	275
Testing for Microwave Radio-Relay Links, Path	58	26
Testing Methods and Equipment, Repeater Station	52	290
Testing of Plastics, The	56	280
Testing of Semi-Permanent Metallic Contacts for Use at Low Voltages, The Design and	53	26
Testing of Subscribers' Dials from the Test-Desk	54	58
Testing of Telegraph Electronic Switching Equipment, Voltage-Margin	53	173
Testing Radio-Telegraph Automatic Error-Correcting Equipment	54	245
Testing 625-Line Monochrome and Colour Television Transmission Systems		
Part 1—Measurement of Distortion and Noise	58	126
Part 2—Picture Monitoring	58	165
Testing Submerged Telephone Repeaters, A Differential Gain Monitoring Panel for	51	132
Testing Wood Poles, A Boring Bit for	51	186
Third International Congress on Telephone Traffic, Paris, 1961, The	54	244
Third Plenary Assembly of the International Telegraph and Telephone Consultative Committee (C.C.I.T.T.), Geneva, June 1964	57	245
Thrust-Borer, A Small Hand-Operated Hydraulic	56	192
Time Assignment Speech Interpolation (T.A.S.I.)	53	197
Time-Division-Multiplex Telegraphy on the Transatlantic Telephone Cable	54	113
Time-Interval Recorder, A	55	186
Time-Shared Code Translators for Letter-Sorting Equipment	55	173
Time Signals by an Electronic clock, Automatic Control of The Rugby Radio (GBR)	53	193
Timers, Local-Call	51	333
Timing at Non-Director Telephone Exchanges, Local-Call	55	83
Tool for Solderless Joints, A Wire-Wrapping	58	111
Tools for External Engineering Work, Portable Electric Power Equipment and	57	226
Torn-Tape Relay System for Electra House, London., A Push Button	57	175
Tower, A.C. Power Supplies to Museum Telephone Exchange and Post Office	58	169
Tower, Birmingham Radio	58	182
Tower, London, and the United Kingdom Network of Microwave Links, Post Office	58	149
Tower, London, Passenger Lifts in the Post Office	58	228
Tower, London, The Opening of the Post Office	58	223
Tower, Museum Radio	55	73
Towers, Reinforced-Concrete Radio	58	178
Traffic Analyser—a Survey of its Use and Limitations, The Electronic	52	19
Traffic Analysis Equipment, Trunk-	58	253
Traffic at Non-Director Automatic Telephone Exchanges, A Portable Equipment for Analysing	52	176
Traffic Capacity of Transatlantic and other Submarine Telephone Cables, Increasing the	52	140
Traffic Engineering, The Use of Electronic Digital Computers for Telephone	58	203
Traffic Equipment with Transistor Switching Elements, A Magnetic-Drum-Type Automatic	53	50
Training Letter-Sorting-Machine Operators, Equipment for	52	55
Training, Programmed Learning-A New Design for (Part 1)	60	253

	Vol.	Page
Training Schemes for Post Office Engineering Youths, New	56	184
Transatlantic and Other Submarine Telephone Cables, Increasing the Traffic Capacity of	52	140
Transatlantic Telephone Cable (CANTAT): Cable Development, Design and Manufacture, Anglo-Canadian	56	82
Transatlantic Telephone Cable (CANTAT): Cable-Laying Gear, Anglo-Canadian	56	91
Transatlantic Telephone Cable (CANTAT): Laying the North Atlantic Link, Anglo-Canadian	56	99
Transatlantic Telephone Cable (CANTAT): Submerged Repeaters, Equalizers and Associated Terminal Equipment, Anglo-Canadian	56	76
Transatlantic Telephone Cable System (CANTAT), The Anglo-Canadian	56	73
Transatlantic Telephone Cable Systems, Automatic Switching of Inland Carrier-Link Sections of	56	237
Transatlantic Telephone Cable TAT-1 Plus Ten Years	60	195
Transatlantic Telephone Cable, Time-Division-Multiplex Telegraphy on the	54	113
Transatlantic Telephone Cables, Signalling Arrangements for Dialling over the	53	201
Transatlantic Television by Cable, Prospects for	52	136
Transducers for Deep-Sea Measurements, Pressure and Temperature	60	133
Transfer Service, Subscriber-Controlled	55	275
Transformers, High-Power Radio-Frequency Broad-Band	51	8
Transistor Characteristics and Applications, Outline of (Parts 1, 2 and 3)	56	122, 196 268
Transistor-Controlled Motor Uniselector, Central Service-Observation Equipment Using a	54	9
Transistor Hearing Aid, A	52	163
Transistor Hearing Aid for Bone-Conduction Receivers, A	57	86
Transistor Life, Assessment of	53	236
Transistor Line Amplifers for Speech and Program Circuits	54	238
Transistor Switching Elements, A Magnetic-Drum-Type Automatic Traffic Equipment with	53	50
Transistor-Type 4-Wire Audio Equipment	56	40
Transistor-Type Self-Synchronizing 7-Unit Monitor for Automatic Error-Correcting Radio-Telegraph Systems, A	57	37
Transistor-Type Submerged Repeaters, St. Margaret's Bay-La Panne 420-Circuit Submarine-Cable System with	60	1
Transistors, A Clean Room for the Production of Silicon Planar	59	34
Transistors, A Line-Signal Monitoring Unit Using	53	121
Transistors, A Multi-Channel Voice-Frequency Telegraph System Using	57	95
Transistors, A Speech Compandor Using Junction	55	14
Transistors, An Audio-Frequency Transmission Measuring Set using	55	19
Transistors, Design and Technology of Silicon Planar	56	239
Transistors in Conjunction with Relay Switching Circuits, The Use of	57	199
Transistors, Some Reliability Studies on Silicon Planar	57	122
Transistors, The Electrical Properties of High-Frequency	57	54
Transit Network, The Signalling and Switching Aspects of the	60	165
Transit Switching Centres Using BXB 1121 Crossbar Equipment Part 1—Trunking Facilities and General Operation	60	302
Translator for Letter-Sorting Machines, A Code	52	199
Translators for Letter-Sorting Equipment, Time-Shared Code	55	173
Transmission Across the Atlantic via a Passive Earth Satellite, Signal	53	270
Transmission by Waveguide, Long-Distance	52	213
Transmission Equipment—51-Type Construction, An Improved Form of Mechanical Construction for	51	197
Transmission Equipment Located in Footway Joint-Boxes, Temperature Tests for	56	160
Transmission Lines-A Correction to be Applied to Bridge Readings, Measurement of the Inductance of	58	249
Transmission Measuring Set Using Transistors, An Audio-Frequency	55	19
Transmission Plan for the Inland Trunk Network, A New Switching and	53	75
Transmission Systems, Testing 625-Line Monochrome and Colour Television (Parts 1 and 2)	58	126, 165
Transmission Systems, The Economic Usage of Broadband	51	212
Transmitter, An Electronic Telegraph Serial-Numbering	55	195
Transmitter Inset No. 16, A New Carbon Transmitter—	58	102
Transcoceanic Line-Signalling System, Frequency Generating Equipment for the	56	119
Transoceanic Telephone-Cable Circuits, Switching Arrangements for Semi-Automatic Operation of	56	105
Transoceanic Telephone Cables, Line and Register Signalling Systems for Dialling over	56	111
Transportable Fault-Recorder for Automatic Exchange Routiners, A	57	197
Transportation of Aerials by Helicopter	57	207
Treatment of Recovered Stores, The Inspection and Subsequent	52	295
Tree-Cutting Unit, A New Self-Contained	57	164
Trench-Cutting Machines	60	14
Trenches in Public Streets, A Short History of Codes of Practice for the Opening and Restoration of	51	108
Trial of a New Type of Wall Telephone	53	55
Trigger-Type Dial—The Dial Automatic, No. 21, An Improved	53	40
Trimphone—Telephone No. 712, Field Trial of the	58	8
Trunk and Tandem Telephone Exchanges, Decentralization of London's	59	75
Trunk Dialling at Unit Automatic Exchanges, The Introduction of Subscriber	59	20
Trunk Network, A New Switching and Transmission Plan for the Inland	53	75
Trunk Routes, Measuring Quality of Service on	60	227
Trunk Telephone Network, 1952–62, A Decade of Growth in the	56	177
Trunk-Traffic Analysis Equipment	58	253
Trunk Transit Network, The Signalling and Switching Aspects of the	60	165
Trunking, Recent Developments in Automatic Telephone Exchange	54	157
12 Mc/s Submerged-Repeater System, A	59	199
Twenty One Years of Submarine Repeaters	57	46

U

U.A.X. Subscribers, Subscriber Trunk Dialling for	56	21
U.A.X's, A Pulsing and Ringing Machine for	53	87
U.A.X's No. 12 and 13— Power Plant No. 214, A New Power Plant for	52	265
U.A.X's No. 13, by Small Non-Director Exchanges, The Supersession of	57	117
U.H.F., and S.H.F. Radio Links in a Developing Area, The Place of V.H.F.,	56	149
Underfloor Heating, Electric	56	181
Underground, Housing of Repeater Equipment	56	158
Underground Plant and Their Detection, Gases in	59	80
Uniselector, Improvements to the Post Office Type 2	57	156
Uniselector, The Post Office Type 4	52	215
Unit Automatic Exchanges, The Introduction of Subscriber Trunk Dialling at	59	20
Unit Method of Automatic Telephone Exchange Design, The	54	14
United Kingdom to Iceland Cable System, SCOTICE —The	55	38
Use of X-Ray Diffraction to Study Defects Occuring During Silicon-Device Manufacture, The	59	94
Use of Electronic Digital Computers for Telephone Traffic Engineering, The	58	203
Use of Fault-History Records for the Maintenance of Telephone Switching Mechanisms, The	58	19
Use of Hammer Finish on Apparatus, The	55	43
Use of Magnetic Cores in Logical and Memory Circuits, The	56	46
Use of Modern Materials for Telephone Cords, The	53	175
Use of Phosphorescent Code Marks in Automatic Letter-Facing and Sorting Machines, The	54	180
Use of Transistors in Conjunction with Relay Switching Circuits, The	57	199
Using a Computer for Main-Line Planning and Circuit Provision	58	272

	Vol.	Page
V		
V.H.F. Land Mobile-Radio Services, Narrower-Frequency-Band Channels for	55	192
V.H.F. Receivers, A New Detection System for Television and	55	219
V.H.F., U.H.F., and S.H.F. Radio Links in a Developing Area, The Place of	56	149
Valves for Deep-Water Submerged Telephone-Repeaters, New	53	98
Vehicle, A Line-Construction	55	226
Vehicle for Radio Investigation Work, A	53	34
Vehicle, Improvements in the 15 Cwt. Class of Engineering	57	9
Vehicle, The Development of a Box-Building	60	131
Vehicles, Conveyance of Mail by Electric	60	170
Vehicles, Four New Engineering	53	257
Ventilation of Apparatus Rooms	54	225
Ventilation Plant for the Post Office Engineering Departments' Main Conference Room	56	194
Vertical Chain Conveyor for Letters and Packets, A	54	273
Vertical Conveyance of Mail, The	51	112
Very-Low Frequency Radio Station, Anthorn	58	114
Viaducts, Providing Post Office Plant on Bridges and	58	54
Voice-Frequency Signalling System For Out-of-Area Exchange Lines, A	60	259
Voice-Frequency Telegraph System, A Wideband Multi-Channel	60	10
Voice-Switched Loudspeaking Telephone—Loudspeaking Telephone No. 4, Designing a	60	65
Voice-Switching Technique, A Prototype Conference Repeater Using a New	59	246
Voltage Incidence and Duration Counter:	55	264
Voltage-Margin Testing of Telegraph Electronic Switching Equipment	53	173
W		
Wall-Mounting Version of the Switching Unit for the Use with 700-Type Telephones—Plan-Set N625, Wall, A	57	224
Wall Telephone, Trial of a New Type of	53	55
Wallboards for Pay-on-Answer Coin-Boxes in Public Call Offices, New Lower-half	54	175
Warning Device for the Deaf-Blend, Doorbell	58	201
Waterproof Loudspeaking Telephone—Loudspeaking-Telephone No. 3, A	55	6
Waveform Distortion in Television Links Part 1—Introduction to Waveform Distortion	52	108
Part 2—The Measurement and Correction of Waveform Distortion	52	188
Waveguide Aerial Feeders, A Swept-Frequency Method of Locating Faults in	54	27
Waveguide, Long-Distance Transmission by	52	213
Western District Office, The New Post Office Railway Station at the New	59	12
Wheatstone Bridge Circuit for Test-Desks	53	205
Wideband Multi-channel Voice-Frequency Telegraph System, A	60	10
Wire-Wrapping Tool for Solderless Joints, A	58	111
Wood Poles, A Boring Bit for Testing	51	186
Work of the Joint Post Office and Ministry of Works Research and Development Group, The	52	251
Working Aloft	52	262
Workshops, Special Lighting for Motor-Transport	58	107
Wrapped Joints in Telephone Exchanges Solderless	54	204
Wrapping Tool for Solderless Joints, A Wire	58	111
X		
X-Ray Diffraction to Study Defects Occurring During Silicon-Device Manufacture, The Use of	59	94
X-Ray Inspection of Polythene-Insulated Submarine-Cable Joints and Gland Mouldings	60	280
Y		
Youths, New Training Scheme for Post Office Engineering	56	184

Author Index

	Vol.	Page
A		
Adams, H. C., and Pratten, L. W. Testing Facilities on Test-Desks in Automatic Telephone Exchanges	53	275
Akester, K. M. A Switching Unit for Use with 700-Type Telephones—Plan Set N625	53	242
Akester, K. M. A Wall-Mounting Version of the Switching Unit for Use with 700-Type Telephones—Plan-Set N625, Wall	57	224
Alderson, G. A., Gresswell, F., and Belk, J. L. Subscribers' Private Meter Equipment	51	338
Alderson, J. H. The Letter-Carrying Chain Conveyor at Leeds Head Post Office	53	95
Alderson, J. H., and Cummings, F. G. The Selective Tray Conveyor at the Accountant Generals' Department, Chesterfield	57	254
Allan, A. F. G. Small-Diameter Coaxial-Cable Developments	57	1
Allery, G. D. Some Aspects of Data Transmission	57	264
Allery, G. D. The Post Office Engineering Department's Computer	55	199
Andrews, J. D. A Code Translator for Letter-Sorting Machines	52	199
Andrews, J. D., and Belcher, P. L. Time-Shared Code Translators for Letter-Sorting Equipment	55	173
Andrews, J. D., Copping, G. P., and Gerard, P. S. Mechanization of the Initial Stages of Processing Mail (Part 2)	53	12
Angell, F. W., and Hayward, R. W. A New Cross-Connexion Assembly for Cabinets and Pillars	53	254
Angell, F. W., and Robinson, H. E. Jointing of Cables Containing Type 174A Small Diameter Coaxial Pairs	57	132
Archer, E. C., and Hutter, J. The Electronic Speech Voltmeter Type 5A	53	92
Arman, L. T., and Meller, V. C. The South Lancashire Radiophone Service	52	253
Arman, L. T., and Peck, E. J. M. Monitoring Station for Mobile-Radio Services	55	228
Arman, L. T., and Peck, E. J. M. Narrower-Frequency-Band Channels for V.H.F. Land Mobile-Radio Services	55	192
Ash, B., and Green, G. H. C. Resistance-Brazing and Moulding Equipment for Use on Polythene-Insulated Submarine Coaxial Cables	57	82
Ashwell, J. L. K., Fox, W. H., and Weaver, A. L. Subscribers' 50-Point Linefinder System	51	81
Askew, E. A. Recent Changes to Telephone Exchange Equipment Engineering and Installation Methods	60	59
Aspinall, E., and Thwaite, H. A Transistor Hearing Aid	52	163
Axe, G. A., and Vogel, E. C. Replacement of the World's First Traffic-Carrying Submerged Repeater	58	32
Ayers, E. W., Lasers and Communications	57	182
Ayers, E. W., and Williams, F. E. Human Factors in Telephony	60	174
B		
Bailey, K. E. A New Announcing Equipment—Equipment, Announcer, No. 9A	60	264
Balcombe, F. G., and Knee, H. Museum Radio Tower	55	73
Banham, H. Physical Design of Subscriber Trunk-Dialling Equipment	51	310
Banham, H. The 5005-Crossbar Telephone-Exchange Switching System (Part 2)	59	271
Banham, H., and Hillen, C. F. J. The Use of Magnetic Cores in Logical and Memory Circuits	56	46
Barker, A. J., and Driver, E. Subscribers' Line Connectors	52	237
Barnard, A. J., Benson, D. L., and Wood, R. A. Controlling Register-Translators (Part 2)	51	272
Bartlett, G. A., Pilling, T., and Stephens, W. J. B. A Continuous-Reading Harmonic Analyser for Complex 50 c/s Waveforms	53	152

	Vol.	Page
Bassett, H. G., and Greenaway, P. E. The Electrical Properties of High-Frequency Transistors	57	54
Bastow, F. J., Collingwood, J. D., Newell, E., and Price, C. K. The Pay-on-Answer Coin-Box System	51	343
Bates, O. R. (Capt), and Brockbank, R. A. Anglo-Canadian Transatlantic Telephone Cable (CANTAT): Laying the North Atlantic Link	56	99
Baxter, E. C., and Wilcox, A. Fleet (London) Automatic Telex Exchange	54	53
Beadle, A. C., and Harvey, F. J. A New Carbon Transmitter—Transmitter Inset No. 16	58	102
Beak, K. L., and Copping, G. P. A Single-Operator Letter-Sorting Machine (Part 1)	51	104
Belcher, P. L., and Andrews, J. D. Time-Shared Code Translators for Letter-Sorting Equipment	55	173
Belk, J. L. An Improved Trigger-Type Dial—The Dial, Automatic, No. 21	53	40
Belk, J. L., Gresswell, F., and Alderson, G. A. Subscribers' Private Meter Equipment	51	338
Bennett, G. H., and Bolton, L. J. Transistor-Type 4-Wire Audio Equipment	56	40
Benson, D. L., Barnard, A. J., and Wood, R. A. Controlling Register-Translators (Part 2)	51	272
Benson, D. L., and Vogan, D. H. Controlling Register-Translators (Parts 3 and 4)	51	280, 291
Best, F. L. A Small Hand-Operated Hydraulic Thrust-Borer	56	192
Bigg, R. W. A Precision Magnetic Tape-Recorder	59	55
Billinghurst, F. M., and Evans, H. W. Baldock Radio-Control Station	58	86
Billinghurst, F. M., and Hutton Penman, P. R. The New Leafield Radio Station (Part 3)	59	196
Bishop, K. G. T., and Robinson, H. E. Joint Loading of Local-Line Cables	60	101
Blakey, H., and Green, B. A. A Printing Recorder for Use with Observation Equipment	53	118
Blakey, H., and Missen, L. A. Photographing Subscribers' Meters	55	162
Blanchard, C. H., and Crisp, A. J. Supergroup Derivation Equipment	54	196
Blanchard, C. H., Newman, W. L., and Willett, W. H. The Switching of Television Circuits in London	53	102
Bluett, R. J., Calkin, S. W., and Wood, F. N. A Remote-Control System for County Fire Brigades	57	233
Bluring, J., and Snow, H. F. Experiments in Aerial-Cable Construction	52	47
Boag, J. F., and Hepplestone, L. Transatlantic Telephone Cable TAT-1 Plus Ten Years	60	195
Bolton, L. J., and Bennett, G. H. Transistor-Type 4 Wire Audio Equipment	56	40
Boocock, R. O., and Clark, E. N. A Boring Bit for Testing Wood Poles	51	186
Bordiss, H, J.K., and Davies, A. P. A 12 Mc/s Coxial Line Equipment—C. E. L. No. 8A	54	73
Borroff, Eileen N. Preservation of Cable Drums	56	44
Bray, W. J. Satellite Communication Systems	55	97
Bray, W. J., and Taylor, F. J. D. Preliminary Results of the Project TELSTAR Communication Satellite Demonstrations and Tests: 10-27 July, 1962	55	147
Breary, D., and Chilver, L. W. J. Layout of Charging Groups and Rearrangement of Line Plant and Switching Equipment for Subscriber Trunk Dialling	51	353
Breary, D., and Thomson, W. E. Planning London's Future Telephone Network by Computer	59	167
Briggs, E., and Peters, B. New Coast Radio Stations	53	170
Britton, G. A. C. R., and Sowton, C. W. Radio Interference (Part 5)	51	202
Broad, E. R. High-Power Radio-Frequency Broad-Band Transformers	51	8
Broadhurst, S. W. The Highgate Wood Electronic Telephone Exchange	55	265
Brockbank, R. A. A Note on the Laying Effect and Aging of Submarine Telephone Cables	54	20
Brockbank, R. A. Twenty One Years of Submarine Repeaters	57	46
Brockbank, R. A., and Bates, O. R. (Capt.) Anglo-Canadian Transatlantic Telephone Cable (CANTAT): Laying the North Atlantic Link	56	99
Brockbank, R. A., Clarke, E. F. S., and Jones, F. Anglo-Canadian Transatlantic Telephone Cable (CANTAT): Cable Development, Design and Manufacture	56	82
Bronsdon, E. G. A Signal Generator for Testing Band 7 (H.F.) Radio Transmitters	53	160
Brondsdon, E. G. Communications for the North Sea Oil-Exploration Project	58	160
Brook, H. D. Induction Hardening of Diagonal-Cutting Nippers	53	247
Brooks, H. P., and Light, R. A. M. Pressurization of Telecommunication Cables, (Part 4)	56	170
Buffin, J. D., and Endersby, J. C. Temperature Tests for Transmission Equipment Located in Footway Joint-Boxes	56	160
Burling, K. G., and Fenning, J. C. A New Detection System for Television and V.H.F. Radio Receivers	55	219
Byrne, S. H. L., and Stotesbury, K. E. The London International Maintenance Centre	52	96

C

	Vol.	Page
Calkin, S. W., Wood, F. W., and Bluett, R. J. A Remote-Control System for County Fire Brigades	57	233
Campbell, A. I. Improvements in the 15 Cwt Class of Engineering Vehicle	57	9
Cartwright, A. D., and Davidson, C. F. A Resonance Isolator for Use at 4, 000 Mc/s	52	69
Chambers, J. A. The New Leafield Radio Station (Part 2)	59	178
Chapman, E. W., and Nott, H. C. An Automatic Tester for Subscribers' Lines and Apparatus	51	120
Chapman, K. J., and Clarke, E. F. S. Anglo-Canadian Transatlantic Telephone Cable (CANTAT): Cable-Laying Gear	56	91
Charlton, E. W. A New Self-Contained Tree-Cutting Unit	57	164
Charlton, E. W. Trench-Cutting Machines	60	14
Charlton, E. W., and Moffatt, J. J. Working Aloft	52	262
Cheesbrough, J. Stafford Cordless Switchboard	54	201
Chesterman, D. A. A Transistor-Type Self-Synchronizing 7-Unit Monitor for Automatic Error-Correcting Radio-Telegraph Systems	57	37
Chesterman, D. A. An Automatic Error-Correcting Radio-Telegraph Multiplex System	60	187
Child, M. R., Levett, A., and Daglish, H. N. The Helium System of the Maser Installation at Goonhilly Radio Station	56	29
Chilver, L. W. J., and Breary, D. Layout of Charging Groups and Rearrangement of Line Plant and Switching Equipment for Subscriber Trunk Dialling	51	353
Clark, E. N., and Boocock, R. O. A Boring Bit for Testing Word Poles	51	186
Clark, T. H., Thomson, I. S., and Price, C. K. A Magnetic-Drum-Type Automatic Traffic Equipment with Transistor Switching Elements	53	50
Clarke, E. F. S., and Chapman, K. J. Anglo-Canadian Transatlantic Telephone Cable (CANTAT): Cable-Laying Gear	56	91
Clarke, E. F. S., Jones, F., and Brockbank, R. A. Angle-Canadian Transatlantic Telephone Cable (CANTAT): Cable Development, Design and Manufacture	56	82
Clarkstone, K. H. A Miniature Lever Key of Improved Design	55	29
Clinch, C. E. E. Repeater Station Testing Methods and Equipment	52	290
Clinch, C. E. E. Time Assignment Speech Interpolation (T.A.S.I.)	53	197
Clinch, C. E. E., and Stenson, D. W. Housing of Repeater Equipment Underground	56	158
Cobbe, D. W. R., and Horsfield, B. R. Effect of Railway Electrification on Post Office Circuits	53	184
Cole, A. C., and Povey, J. A. The Use of Electronic Digital Computers for Telephone Traffic Engineering	58	203
Collier, E. G., and Wheele, D. W. E. Telegraph Distortion on Physical (D.C.) Lines and Telegraph Machines	52	61
Collings, E. R., and Thomas, A. W. Four New Engineering Vehicles	53	257
Collingwood, J. D. A Calling Aid for Disabled Subscribers	54	233
Collingwood, J. D., Bastow, F. J., Newell, E., and Price, C. K. The Pay-on-Answer Coin-Box System	51	343
Collins, J. H. Generation of Meter Pulses for the Automatic Telex Service	52	196
Colyer, J. O. A New Manhole-Cover Lifter—Lifter, Manhole Cover, No. 3	60	251
Colyer, J. O., Tharby, R., and Senior, R. C. Gases in Underground Plant and Their Detection	59	80
Conen, B. H. The Failure of Plastics Insulants due to Silver Migration	58	245

	Vol.	Page
Cooper, H. B., and Light, R. A. M. Locating Faults Between Jointing Points on Pressurized Cables	53	89
Copping, B., and Fiddler, R. G. Designing a Voice-Switched Loudspeaking Telephone—Loudspeaking Telephone No. 4	60	65
Copping, G. P., and Beak, K. L. A Single-Operator Letter-Sorting Machine (Part 1)	51	104
Copping, G. P., and Myers, T. R. Mechanization of the Initial Stages of Processing Mail (Part 1)	52	286
Copping, G. P., Gerard, P. S., and Andrews, J. D. Mechanization of the Initial Stages of Processing Mail (Part 2)	53	12
Corke, R. L. An International Experiment in Frequency Comparison	55	80
Corke, R. L., and Searls, A. W. A Clean Room for the Production of Silicon Planar Transistors	59	34
Corner, A. C. The 5005-Crossbar Telephone-Exchange Switching System (Part 1)	59	170
Cosier, J. E. H., and Haley, G. The Jointing of Polythene-Insulated Coaxial Cables	51	22
Cosier, J. E. H., and Windle, R. W. X-Ray Inspection of Polythene-Insulated Submarine-Cable Joints and Gland Mouldings	60	280
Coulman, A. H., and Goss, C. E. G. Emergency Mobile Teleprinter Automatic Switching Units	53	268
Coyte, A., and Ellen, L. W. A Digital-Display Decibelmeter for Audio Frequencies	60	274
Craft, Joan L. Standardization and Control of Colour for the 700-Type Telephone	56	247
Craggs, J. F., Walters, J. R., and Keep, J. F. Pressurization of Telecommunication Cables (Part 1)	55	260
(Parts 2 and 3)	56	25, 129
Crank, G. J., and Hathaway, H. A. A Cable-Fault Locator for Submarine Cables	55	8
Crank, G. J., and Hathaway, H. A. A Self-Tuning Insertion-Loss Measuring Equipment (10 ke/s–1.5 Mc/s)	52	280
Crisp. A. J., and Blanchard, C. H., Supergroup Derivation Equipment	54	196
Croisdale, A. C., Improvements in Automatic Error-Correction Equipment Used on H.F. Radio Telegraph Services	55	253
Croisdale, A. C. Teleprinting Over Long-Distance Radio Links (Parts 1 and 2)	51	88, 219
Croisdale, A. C., and Evans, H. E. Time-Division Multiplex Telegraphy on the Transatlantic Telephone Cable	54	113
Croisdale, A. C., and Harrison, A. F. Testing Radio-Telegraph Automatic Error-Correcting Equipment	54	245
Croisdale, A. C., and Hunt, C. S. Synchronous Multiplex Telegraphy on Intercontinental Submarine Telephone Cables.	60	52
Croisdale, A. C., and Robins, J. M. An Electronic Telegraph Buffer Store Using an Magnetic Drum	56	262
Crooks, K. R., and Holmes, A. C. Programmed Learning—A New Design for Training (Part 1)	60	253
Crosby, G. W. A Test Instrument with a Direct-Reading Fault Bridge-Ohmmeter No. 18A	60	285
Cross, B. Using a Computer for Main-Line Planning and Circuit Provision	58	272
Cumming, W. S., Russell, P. S., Gorton, B. D., and Lumber, A. L. Pulse-Generating and Tariff-Control Equipment for Periodic Metering	51	324
Cummings, F. G. The Drum-Type Machine for Cleaning Mail Bags	53	36
Cummings, F. G. and Alderson, J. H. The Selective Tray Conveyor at the Accountant General's Department, Chesterfield	57	254

D

	Vol.	Page
Daglish, H. N. Low-Noise Solid-State Microwave Amplifiers	58	11
Daglish, H. N., Child, M. R., and Levett, A. The Helium System of the Maser Installation at Goonhilly Radio Station.	56	29
Daniels, E. E., and Ellis, W. A. Switching and Signalling Techniques for the Intercontinental Automatic Telex Service (Parts 1 and 2)	60	210, 266
Daniels, E. E., and Forster, A. E. T. Subscriber Dialling of International Telex Calls	54	103
Davey, D. V., Denning, S. F., and Heward, F. C. British Joint Computer Conference, 1966	59	91
Davey, L. R. New Key-and-Lamp Desk Unit.	56	156
Davidson, C. F., and Cartwright, A. D. A Resonance Isolator for Use at 4,000 Mc/s	52	69
Davies, A. P., and Bordiss, H. J. K. A 12 Mc/s Coaxial Line Equipment—C. E. L. No. 8A	54	73
Davies, A. P., and Lines, P. W. New North Sea 120-Circuit Submarine-Cable Systems	58	93
Davies, J. A. An Automatic Analyser for Recorder Charts	58	257
Davies, W. M., and Perkins, K. G. The PVR 800 High Frequency (3–30 MHz) Radio Receiver	60	204
Davis, E., and Francis, H. E. Decentralization of London's Trunk and Tandem Telephone Exchanges	59	75
Deadman, D. J., and Slight, J. R. A New Approach to the Duct-Rodding Problem—Ductmotor No. 1	56	91
Deering, J. E. A Duct Rodding Machine	57	180
Denning, S. F., Heward, F. C., and Davey, D. V. British Joint Computer Conference, 1966	59	91
Deutsch, E. S. Computer Simulation of a Character-Recognition Machine (Parts 1 and 2)	60	39, 104
Dickie, W. A Vertical Chain Conveyor for Letters and Packets	54	273
Didcock, F. E., and Parsons, A. P. Recording Decibelmeters	51	145
Dilworth, R. A. Radio Interference (Part 3)	51	40
Donn, G. S., and Redman, F. W. G. An Automatic Meter-Observation Equipment	53	124
Driver, E., and Barker, A. J. Subscribers' Line Connectors	52	237

E

	Vol.	Page
Easterling, C. E. Improvements in the Teleprinter No. 7	55	240
Eastwood, G. W. Ductile Permanent-Magnet Materials	53	262
Edwards, P. J., and Jones, D. G. Post Office Tower, London, and the United Kingdom Network of Microwave Links	58	149
Edwards, P. J., and Jones, D. G. The Post Office Network of Radio-Relay Stations (Part 1 and 2)	57	147, 238
Edwards, R. J. A Fault-Location Test Set for Repeatered Submarine cables.	58	262
Edwards, R. J. Measurement of the Inductance of Transmission Lines—A Correction to be Applied to Bridge Readings	58	249
Eley, A. C., and Lowe, W. T. Electronic Telephone Exchange Systems	60	140
Elkins, A. H. Subscriber Push-Button Telephones Market-Research Trial	59	200
Elkins, N. A., Mills, D. E, and Fensome, L. D. W. A Receiver for Direct-Pick-Up Television Links	53	239
Ellen, L. W. A Simple Sum-of-Squares Electronic Calculator	56	6
Ellen, L. W., and Coyte, A. A Digital-Display Decibelmeter for Audio Frequencies	60	274
Ellis, D. R. B. Equipment for the Provision of Statistical Data Concerning Subscriber-Dialled Trunk Calls	53	127
Ellis, D. R. B., and Gorton B. D. Local-Call Timers	51	333
Ellis, W. A. Dialling into the United Kingdom Telex Network over Long-Distance Radio Circuits	56	162
Ellis, W. A., and Daniels, E. E. Switching and Signalling Techniques for the Intercontinental Telex Service (Parts 1 and 2)	60	210, 266
Endersby, J. C. and Buffin, J. D. Temperature Tests for Transmission Equipment Located in Footway Joint-Boxes	56	160
Endersby, J. C., and Sixsmith, J. Coaxial Line Equipment for Small-Diameter Cables	55	44
Evans, H. E., and Croisdale, A. C. Time-Division-Multiplex Telegraphy on the Transatlantic Telephone Cable	54	113
Evans, H. W., and Billinghurst, F. M. Baldock Radio-Control Station	58	86

F

	Vol.	Page
Fagg, S. L. F., and Mead, F. G. Practical Aspects of Providing Telephone Plant on New Housing Estates	59	241
Fagg, S. L. F., and Mead, F. G. Providing Post Office Plant on Bridges and Viaducts	58	54
Fagg, S. L. F., and Wilson, W. T. Laying Plastic Ducts by Moleplough	59	104
Fairweather, A., and Frost, E. J. The Design and Testing of Semi-Permanent Metallic Contacts for Use at Low Voltages	53	26
Feasey, R. J., and Young, E. J. Modifications to Aluminium-Alloy Ladders	53	80
Fenning, J. C., and Burling, K. G. A New Detection System for Television and V.H.F. Radio Receivers	55	219

	Vol.	Page
Fensome, L. D. W., Elkins, N. A., and Mills, D. E. A Receiver for Direct-Pick-Up Television Links	53	239
Ferguson, K. H., Scarbrough, R. J. D., and Searls, A. W. The Generation of Stable Carrier Frequencies in the Range 3, 800—4, 200 Mc/s	52	125
Fernie, J. B., and Walters, J. R. Submarine-Cable Earth Electrode Systems	57	105
Fiddes, R. G., and Stephenson, M. Air-Conditioning in Computer Accommodation	57	39
Fiddler, R. G. and Copping, B. Designing a Voice-Switched Loudspeaking Telephone—Loudspeaking Telephone No. 4	60	65
Finn, F. G. A Wire-Wrapping Tool for Solderless Joints	58	111
Fitch, J. W. Mobile Non-Director Telephone Exchanges	57	89
Fletcher, N. E., and Harris, R. H. Field Trials of Large Polythene Cables in Subscribers' Local-Line Networks	56	8
Flowers, T. H. Cyclic-Pulse Switching Systems	51	46
Ford, A. E., and Whyte, J. S. An Insertion-Loss Display and Recording Equipment for the Frequency Range 50 kc/s—8 Mc/s	53	145
Forster, A. E. T. Automatic Switching for the Telex Service	51	193
Forster, A. E. T., and Daniels, E. E. Subscriber Dialling of International Telex Calls	54	103
Forster, C. F. Use of Phosphorescent Code Marks in Automatic Letter-Facing and Sorting Machines	54	180
Forty, A. J. Application of Program Evaluation and Review Techniques to P.A.B.X. Installation (Part 1)	57	193
Fox, W. H., Ashwell, J. L. K., and Weaver, A. L. Subscribers' 50-Point Linefinder System	51	81
Francis, H. E. The General Plan for Subscriber Trunk Dialling	51	258
Francis, H. E., and Davis, E. Decentralization of London's Trunk and Tandem Telephone Exchanges	59	75
Francis, H. E., and Tobin, W. J. E. The Next Steps	51	373
François, R. A. A Tester for Pulse Regenerators	51	100
François, R. A., and Holligon, E. R. Measuring Quality of Service on Trunk Routes	60	227
French, J. A. T., and Harding, D. J. An Efficient Electronic Switch, The Bothway Gate	52	37
French, J. A. T., Harding, D. J., and Jarvis, J. R. Outline of Transistor Characteristics and Applications (Parts1, 2 and 3)	56	122, 196, 268
French, J. A. T., and Lowe, W. T. Electronic Telephone Exchanges: Component Selection and Mode of Operation	59	233
Friday, F. F. Special Lighting for Motor Transport Workshops	58	107
Frome, Sir Norman. Plastic Telephone Cable Construction in the Tropics	53	162
Froom, R. P., Lee, F. J., Hilton, C. G., and Mackrill, P. A Monitor for 7-Unit Synchronous Error-Correcting Systems for Use on Radio-Telegraph Circuits	53	1
Froom, R. P., Lee, F. J., Hilton, C. G., and Mackrill, P. Laboratory Test Equipment for Synchronous Regenerative Radio-Telegraph Systems	52	276
Frost, A. C., and Wheeler, L. K. Telegraph Distortion in the Trunk Network of the Telegraph Automatic Switching System	52	103
Frost, E. J., and Fairweather, A. The Design and Testing of Semi-Permanent Metallic Contacts for Use at Low Voltages	53	26

G

	Vol.	Page
Garbutt, A. W. N. A Tester for Surge-Resistant Fuses	54	262
Gardiner, R. Testing Facilities and Methods for the 405-Line Television Network	56	275
Gardiner, R., and Holt, J. B. Closed-Circuit Colour Television	53	277
Gauntlett, R. D. Dual-Frequency-Band Horn-Aerial Systems	60	217
Gaut, R. G. Engineering Aspects of Depreciation Accounting	55	113
Gee, J. H. An Improved Congestion Announcer	56	36
Gee, J. H. A Motor Alternator for A.C. Signalling Supplies	54	268
Gee, J. H. Frequency-Generating Equipment for the Transoceanic Line-Signalling System	56	119
Genna, W. N., Morris, D. W., and Thurlow, E. W. A Microwave Model Equipment for Use in the Study of the Directivity Characteristics of Short-Wave Aerials (Parts 1 and 2)	51	126, 173
Gerard, P. S., Copping, G. P., and Andrews, J. D. Mechanization of the Initial Stages of Processing Mail (Part 2)	53	12
Gerard, P. S., and Pilling, T. Automatic Letter Sorting-The Luton Experiment	54	31
Gibbon, R. D., and Whilton, H. E. Parcel-Label Printing and Issuing Machines	52	218
Glover, D. W., and Hooker, E. J. A Moisture Barrier for Polythene-Sheathed Cables	53	253
Goldsmith, J. R. and Hewstone, H. D. Exchange-Line Costing Study	56	186
Gore, J. S., and Moore, M. B. A New Range of Ringing Converters for Subscribers' Apparatus	57	187
Gorton, B. D. Local-Call Timing at Non-Director Telephone Exchanges	55	83
Gorton, B. D., and Ellis, D. R. B. Local-Call Timers	51	333
Gorton, B. D., and Kearsley-Brown, R. H. G. Subscriber Trunk Dialling at Non-Director Satellite Telephone Exchanges	55	86
Gorton, B. D., Russell, P. S., Lumber, A. L., and Cumming, W. S. Pulse-Generating and Tariff-Control Equipment for Periodic Metering	51	324
Goss, C. E. G., and Coulman, A. H. Emergency Mobile Teleprinter Automatic Switching Units	53	268
Green, B. A., and Blakey, H. A Printing Recorder for Use with Observation Equipment	53	118
Green, G. H. C., and Ash, B. Resistance-Brazing and Moulding Equipment for Use on Polythene-Insulated Submarine Coaxial Cables	57	82
Greenaway, P. E., and Bassett, H. G. The Electrical Properties of High-Frequency Transistors	57	54
Gresswell, F., Belk, J. L., and Alderson, G. A. Subscribers' Private Meter Equipment	51	338
Griffiths, D. C. The Engineer-in-Chief's Library Information Service	54	111
Groves, H. J., and Taylor, S. A. A Differential Gain Monitoring Panel for Testing Submerged Telephone Repeaters	51	132

H

	Vol.	Page
Haines, G. E., and Wilson, W. T. Developments in Overhead Construction	57	260
Haley, G., and Cosier, J. E. H. The Jointing of Polythene-Insulated Coaxial Cables	51	22
Haley, G., and Kolanowski, J. Pressure and Temperature Transducers for Deep-Sea Measurements	60	133
Haley, G., and Urben, T. F. A. An Automatic Screw-Sorting Machine	57	32
Hall, L. L. Anthorn Very-Low Frequency Radio Station	58	114
Halliday, C. M., and Lidbetter, E. J. A New Small Cordless P.M.B.X. Switchboard	54	22
Halliday, C. M., and Lidbetter, E. J. New Cordless P.M.B.X. s No. 2/3A and 2/4A	55	244
Halliwell, Mary A., and Henderson, J. C. The Use of X-Ray Diffraction to Study Defects Occurring During Silicon-Device Manufacture	59	94
Halsey, R. J. The Anglo-Canadian Transatlantic Telephone Cable System (CANTAT)	56	73
Halsey, R. J. The Economic Usage of Broadband Transmission Systems	51	212
Halsey, R. J., and Rendall, A. R. A. Prospects for Transatlantic Television by Cable	52	136
Hanman, B. L. G., and Smith, N. D. Birmingham Radio Tower	58	182
Harding, D. J., and French, J. A. T. An Efficient Electronic Switch—The Bothway Gate	52	37
Harding, D. J., Jarvis, J. R., and French, J. A. T. Outline of Transistor Characteristics and Applications (Part 1, 2 and 3)	56	122, 196, 268
Harding, J. P. Concrete	52	29
Harris, E. T. C., and King, K. C. A. A Medium-Distance, Built-in Out-Band Signalling, Carrier Terminal Equipment (Parts 1 and 2)	52	122, 179
Harris, E. T. C., and Spratt, C. J. An Improved Form of Mechanical Construction for Transmission Equipment—51-Type Construction	51	197
Harris, L. R. F. Electronic Telephone Exchanges: An Introductory Review of Developments	59	211
Harris, R. H. Cable Creepage	52	115
Harris, R. H. and Fletcher, N. E. Field Trials of Large Polythene Cables in Subscriber's Local-Line Networks	56	8

	Vol.	Page
Harrison, A. F. Voltage-Margin Testing of Telegraph Electronic Switching Equipment	53	173
Harrison, A. F., and Croisdale, A. C. Testing Radio-Telegraph Automatic Error-Correcting Equipment	54	245
Harrison, J. C., and Nicolls, A. C. Recent Improvements in the Inking System of a Recording Decibelmeter	52	26
Hart, M. The New Leafield Radio Station (Part 5)	59	283
Harvey, F. J. A New Wall Telephone—Telephone No 711	57	51
Harvey, F. J., and Beadle, A. C. A New Carbon Transmitter—Transmitter Inset No 16	58	102
Hathaway, H. A., and Crank, G. J. A Cable-Fault Locator for Submarine Cables	55	8
Hathaway, H. A., and Crank, G. J. A Self-Tuning Insertion-Loss Measuring Equipment (10 kc/s—1.5 Mc/s)	52	280
Hatton, G., and Pattemore, T. E. Application of Program Evaluation and Review Techniques to P.A.B.X. Installation (Part 2)	57	269
Hayes, H. C. S. Aluminium Conductors for Telephone Cables	59	106
Hayes, H. C. S. Polythene-Sheathed Underground Telephone Cables	53	250
Haythornthwaite, F. Ratchet Relay No. 2	60	97
Haythornthwaite, F., and Manning, D. J. Improvements to the Post Office Type 2 Uniselector	57	156
Hayton, F. New Jointers' Tents—Tents, Jointers', No. 3 and 4	59	52
Hayward, R. W., and Angell, F. W. A New Cross-Connexion Assembly for Cabinets and Pillars	53	254
Hearn, A. F. L. Raising and Setting Manhole and Joint-Box Frames and Covers Using Polyester Resin	56	252
arn, A. F. L., and Jennings, S. W. A New Frame and Cover for Carriageway Manholes and Joint-Boxes	54	164
earnden, A. H. A Standard Unattended P.A.B.X—P.A.B.X. No. 6	58	238
Hearsey, R. L. New Safety Belt for Overhead Work—Safety Belt No. 3	57	251
Henderson, J. C. Assessment of Transistor Life	53	236
Henderson, J. C., and Halliwell, Mary A. The Use of X-Ray Diffraction to Study Defects Occurring During Silicon-Device Manufacture	59	94
Henderson, J. C., and Wilson, Sylvia, J. Design and Technology of Silicon Planar Transistors	56	239
Hepplestone, L., and Boag, J. F. Transatlantic Telephone Cable TAT-1 Plus Ten Years	60	195
Heptinstall, D. L., and Jones, P. F. Switching Arrangements for Semi-Automatic Operation of Transoceanic Telephone-Cable Circuits	56	105
Heptinstall, D. L., and Ryan, W. A. Metering Over Junctions	51	335
Heward, F. C. Information Indexing by Computer	60	28
Heward, F. C., Davey, D. V., and Denning, S. F. British Joint Computer Conference 1966	59	91
Hewstone, H. D., and Goldsmith, J. R. Exchange-Line Costing Study	56	186
Hillen, C. F. J., and Banham, H. The Use of Magnetic Cores in Logical and Memory Circuits	56	46
Hillen, C. F. J., Long, R. C., and Porritt, W. R. A. The Field Trial of Two Small Electronic Exchanges at Leamington and Peterborough	58	1
Hilton, C. G., Froom, R. P., Lee, F. J., and Mackrill, P. A Monitor for 7-Unit Synchronous Error-Correcting Systems for Use on Radio-Telegraph Circuits	53	1
Hilton, C. G., Froom, R. P., Lee, F. J., and Mackrill, P. Laboratory Test Equipment for Synchronous Regenerative Radio-Telegraph Systems	52	276
Hix, K. W. Connexions to Printed-Circuit Boards	57	22
Hix, K. W. Solderless Wrapped Joints in Telephone Exchanges	54	204
Hix, K. W. Telephone Equipment Connexions	55	166
Hix, K. W. The Telephone Exchange Main Distribution Frame	53	226
Hogben, C. W. A 700-Type Telephone Handset Providing Lamp Calling Signals—Handset No. 7	58	250
Holden, R., and Meatyard, L. R. Extension of Ongar Radio Station	53	158
Holmes, A. C., and Crooks, K. R. Programmed Learning—A New Design for Training (Part 1)	60	253
Holmes, M. F. Semiconductor Device Developments: General Introduction	59	202
Holmes, M. F., and Reynolds, F. H. New Valves for Deep-Water Submerged Telephone-Repeaters	53	98
Holt, J. B., and Gardiner, R. Closed-Circuit Colour Television	53	277
Hooker, E. J., and Glover, D. W. A Moisture Barrier for Polythene Sheathed Cables	53	253
Hooper, J. A Swept-Frequency Method of Locating Faults in Waveguide Aerial Feeders	54	27
Hopwood, R. W. Engineering Aspects of Staff Comfort	59	26
Hopwood, R. W. Ventilation of Apparatus Rooms	54	225
Horrocks, P., and Pilling, T. Coding Desk and Code-Mark Reader for Use with Automatic Letter-Sorting Machines	54	122
Horsfield, B. R., and Cobbe, D. W. R. Effect of Railway Electrification on Post Office Circuits	53	184
Howard, R. F. A Cordless Telex Switchboard	57	110
Hoyle, J. H. The Introduction of Subscriber Trunk Dialling at Unit Automatic Exchanges	59	20
Huggins, G., and Smith, G. L. Recording and Control of Information-Service Announcements	55	158
Humphries, W. A., Woods, A. E., and Rangecroft, W. The First Subscriber-Trunk-Dialling Installation at Bristol	51	360
Hunt, A. H. A Combined Linefinder and Final-Selector Rack	58	84
Hunt, A. H. The Supersession of U.A.X.s 13 by Small Non-Director Exchanges	57	117
Hunt, C. S. A Wideband Multi-Channel Voice-Frequency Telegraph System	60	10
Hunt, C. S. Frequency-Modulated Voice-Frequency Telegraph System for Radio Telegraph Services	53	21
Hunt, C. S., and Croisdale, A. C. Synchronous Multiplex Telegraphy on Intercontinental Submarine Telephone Cables	60	52
Hunt, R. J. The Pole-Erection Unit	60	93
Hunter, R. S. Ventilation Plant for the Post Office Engineering Department's Main Conference Room	56	194
Hutt, B. J., and Jarvis, J. R. Pulse-Code Modulation (Part 2)	54	189
Hutter, J. Customer Response to Telephone Circuits Routed Via a Synchronous-Orbit Satellite	60	181
Hutter, J., and Archer, E. C. The Electronic Speech Voltmeter Type 5A	53	92
Hutton-Penman, P. R., and Billinghurst, F. M. The New Leafield Radio Station (Part 3)	59	196
Hyatt, J. L. The London Radiophone Service	59	98

I

Ireland, W. A., and Price, C. K. Incoming Core-Type Register-Translator for Director Areas (Parts 1 and 2)	59	119, 183
Ithell, A. H., and Williams, F. E. A New Artificial Ear	60	47

J

Jackson, B. S., and Wase, A. E. N. The New Leafield Radio Station (Part 4)	59	267
Jackson, F. G. Subscriber Trunk Dialling for U.A.X. Subscribers	56	21
Jackson, F. G., and Kearsley-Brown, R. H. G. New Developments in Remote Auto-Manual Centre Working	58	119
Jarvis, J. R. A Compander for a 12-Channel Carrier Telephone System for Use on Unloaded Audio Cables	51	29
Jarvis, J. R., French, J. A. T., and Harding, D. J. Outline of Transistor Characteristics and Applications (Part 1, 2 and 3)	56	122, 196, 268
Jarvis, J. R., and Hutt, B. J. Pulse-Code Modulation (Part 2)	54	189
Jeffrey, R. J. Measuring Techniques for the Inspection of Apparatus Parts	54	235
Jennings, S. W., and Hearn, A. F. L. A New Frame and Cover for Carriageway Manholes and Joint-Boxes	54	164
Jennings, S. W., and Priestley, W. D. A Novel Way of Providing a Cable Route Across a Busy and Congested Water-way	51	94
Jeynes, E. Planning and Works Aspects of 24-Circuit Pulse-Code-Modulation System	60	33
Johnson, N. G. A. C. Power Supplies to Museum Telephone Exchange and the Post Office Tower	58	169
Jolley, E. H. Ninety-Seven Years of Engineers-in-Chief	60	83
Jones, D. C., and Martin, G. C. Doorbell Warning Device for the Deaf-Blind	58	201
Jones, D. C., and Rigby, D. F. A Transistor Hearing Aid for Bone-Conduction Receivers	57	86

	Vol.	Page
Jones, D. G., and Edwards, P. J. Post Office Tower, London and the United Kingdom Network of Microwave Links	58	149
Jones, D. G., and Edwards, P. J. The Post Office Network of Radio-Relay Stations (Parts 1 and 2)	57	147, 238
Jones, F., and Morse, G. E. A New Instrument for the Precise Measurement of Dielectric Loss	58	187
Jones, F., Brockbank, R. A., and Clarke, E. F. S., Anglo-Canadian Transatlantic Telephone Cable (CANTAT): Cable Development, Design and Manufacture	56	82
Jones, P. F., and Heptinstall, D. L., Switching Arrangements for Semi-Automatic Operation of Transoceanic Telephone-Cable Circuits	56	105
Jones, R. A. A Prototype Conference Repeater Using a New Voice-Switching Technique	59	246
Jones, T. L. *H. M. T. S. Alert*	54	134
Joyce, L. A., and Lander, A. C. An Electronic Clock for Television Network Switching	53	108

K

Kearsley-Brown, R. H. G., and Gorton, B. D. Subscriber Trunk Dialling at Non-Director Satellite Telephone Exchanges	55	86
Kearsley-Brown, R. H. G., and Jackson, F. G. New Developments in Remote Auto-Manual Centre Working	58	119
Keep, J. F., Craggs, J. F., and Walters, J. R. Pressurization of Telecommunication Cables (Part 1)	55	260
(Parts 2 and 3)	56	25, 129
Kelson, D., and Miles, J. V. Signalling System A.C. No. 9	55	51
King, K. C. A., and Harris, E.T.C. A Medium-Distance, Built-in Out-Band Signalling, Carrier Terminal Equipment (Parts 1 and 2)	52	122, 179
King, R, E., and Woolley, F. The Repair of Faulty Loading Pots	59	5
Kirkby, R. R., and Sellwood, S. J. A Portable Emission Tester for Hot-Cathode Mercury-Vapour Rectifiers	57	128
Knaggs, A. A New Pulsing Relay—Post Office Relay Type 19	57	190
Knaggs, A., and Rogers, B. H. E. The Post Office Type 12 Relay	57	27
Knee, H., and Balcombe, F. G. Museum Radio Tower	55	73
Kolanowski, J., and Haley, G. Pressure and Temperature Transducers for Deep-Sea Measurements	60	133
Kyme, R. C., and Scanlan, W. Calculation of Current Values for Determining Bus-Bar Sizes in Automatic Telephone Exchanges	57	15

L

Lander, A. C., and Joyce, L. A. An Electronic Clock for Television Network Switching	53	108
Langton, H. J. A Single-Operator Letter-Sorting Machine (Part 2)	51	188
Langton, H. J. The Vertical Conveyance of Mail	51	112
Latimer, E. D., and Robinson, H. E. Sheath Jointing of Plastic-Sheathed Cables	59	206
Laver, F. J. M. An Introduction to Electronic Computer Systems for Office Use	52	13
Laver, F. J. M. On Programming Computers	55	125
Laver, K. S. The Progressive Development of Routiners for Automatic Telephone Exchanges	60	118
Law, H. B., Reynolds, J., and Simpson, W. G. Channel Equipment Design for Economy of Band-width	53	112
Lawrence, J. A. Opening of the First Production Electronic Telephone Exchange at Ambergate	59	287
Lawrence, J. P. The Unit Method of Automatic Telephone Exchange Design	54	14
Lee, F. J., Froom, R. P., Hilton, C. G. and Mackrill, P. A Monitor for 7-Unit Synchronous Error-Correcting System for Use on Radio-Telegraph Circuits	53	1
Lee, F. J., Froom, R. P., Hilton, C. G., and Mackrill, P. Laboratory Test Equipment for Synchronous Regenerative Radio-Telegraph Systems	52	276
Lee, F. N., and Marsh, H. A Push Button Torn-Tape Relay System for Electra House, London	57	175
Lee, K. W., and Ratcliffe, K. S. An Audio-Frequency Transmission Measuring Set Using Transistors	55	19
Leggett, G. R. Field Trial of Repertory Diallers	58	124
Lelliott, S. R., and Thurlow, E. W. Path Testing for Microwave Radio-Relay Links	58	26
Levett, A., Daglish, H. N., and Child, M. R. The Helium System of the Maser Installation at Goonhilly Radio Station	56	29
Lidbetter, E. J. The 4-Wire Extension Principle for Small Cordless P.M.B.X Switchboards	53	167
Lidbetter, E. J., and Halliday, C. M. A New Small Cordless P.M.B.X. Switchboard	54	22
Lidbetter, E. J., and Halliday, C. M. New Cordless P.M.B.X. Switchboards—P.M.B.X.s No. 2/3A and 2/4A	55	244
Light, R. A. M., and Brooks, H. P. Pressurization of Telecommunication Cables, (Part 4)	56	170
Light, R. A. M., and Cooper, H. B. Locating Faults Between Jointing Points on Pressurized Cables	53	89
Lines, P. W., and Davies, A. P. New North Sea 120-Circuit Submarine-Cable Systems	58	93
Little, S. J. Protection of Exchange Equipment and Subscribers' Installations from Damage Due to Lightning and Contacts with Power Lines	53	219
Little, S. J. The Joint Use of Poles for Telecommunication and Power Lines	55	31
Little, S. J. The Post Office and the Supply of Electrical Energy by Statutory and Non-Statutory Undertakings in the United Kingdom	52	184
Lloyd, H. F., and Sixsmith, J. A Television-Network Switching Equipment to 625-Line Colour Standards	60	199
Long, R. C., Porritt, W. R. A., and Hillen, C. F. J. The Field Trial of Two Small Electronic Exchanges at Leamington and Peterborough	58	1
Lord, G. W. The Cold Rolling of Very Thin Ferrous Tapes	54	51
Loughhead, W. A. E., and Matthews, G. A. An Experimental 3-Digit Electronic Director Using Magnetic-Core Circuits	56	255
Lowe, W. T. A Battery-Powered Hearing-Aid Handset—Handset No. 5	54	271
Lowe, W. T. A New Telephone for Deaf Subscribers—Handset No. 4	53	24
Lowe, W. T. A Telephone for Subscribers with Weak Voices	54	242
Lowe, W. T. A Waterproof Loudspeaking Telephone—Loudspeaking-Telephone No. 3	55	6
Lowe, W. T., and Eley, A. C. Electronic Telephone Exchanges: Reed Relays for Exchange Systems	60	140
Lowe, W. T., and French, J. A. T. Electronic Telephone Exchanges: Component Selection and Mode of Operation	59	233
Lowe, W. T., and Wilson, F. A. A Loudspeaking Telephone without Voice Switching—Loudspeaking-Telephone No. 1	54	1
Lumber, A. L., Russell, P. S., Gorton, B. D., and Cumming, W. S. Pulse-Generating and Tariff-Control Equipment for Periodic Metering	51	324
Lund, A. E. Stay Anchorages	52	53
Lynch, A. C., and Speight, E. A. A Photo-Electric Device for Measuring Cable Diameter During Extrusion	57	79

M

McClements, J. S. Automatic Control of the Rugby Radio (GBR) Time Signals by an Electronic Clock	53	193
MacDiarmid, I. F. Waveform Distortion in Television Links (Parts 1 and 2)	52	108, 188
McGrath, H. T. New Computing Facilities for the Post Office Engineering Department	58	38
McGrath, H. T. The Electronic Traffic Analyser—A Survey of its Use and Limitations	52	19
McGrath, H. T. The London Payroll Computers	52	142
Mackay, A. C. The New Post Office Railway Station at the New Western District Office	59	12
MacKenzie, W. K. The Work of the Joint Post Office and Ministry of Works Research and Development Group	52	251
Mackrill, P., Froom, R. P., Lee, F. J., and Hilton, C. G. A Monitor for 7-Unit Synchronous Error-Correcting Systems for Use on Radio-Telegraph Circuits	53	1
Mackrill, P., Froom, R. P., Lee, F. J., and Hilton, C. G. Laboratory Test Equipment for Synchronous Regenerative Radio-Telegraph Systems	52	276
Mc Lusky, R. F., Walker, N., and Stallworthy, F. A. Transit Switching Centres Using BXB 1121 Crossbar Equipment (Part 1)	60	302

	Vol.	Page
MacPherson, A. Radio Interference (Part 4)	51	115
Mahoney, A. E. Operation and Maintenance of Secondary-Cell Batteries	59	43
Makemson, A. A., and Newell, E. An Electronic Pulse-Duration Analyser	51	64
Manning, D. J. The Post Office Type 1 Ratchet Relay	53	154
Manning, D. J. The Post Office Type 4 Uniselector	52	215
Manning, D. J., and Haythornthwaite, F. Improvements to the Post-Office Type 2 Uniselector	57	156
Marchant, P. A. An Introduction to Large Cordless P.A.B.X.s.	53	231
Marchinton, A., and Sheppard, N. F. Quality Control of Brazed Seals in Deep-Sea Repeaters	60	44
Marks, D. J. A Decade of Growth in the Trunk Telephone Network 1952-62	56	177
Marriott, P. E. Passenger Lifts in the Post Office Tower, London	58	228
Marsh, H. An Electronic Telegraph Serial-Numbering Transmitter	55	195
Marsh, H., and Lee, F. W. A Push-Button Torn-Tape Relay System for Electra House, London	57	175
Martin, G. C., and Jones, D. C. Doorbell Warning Device for the Deaf-Blind	58	201
Martin, J. Electronic Telephone Exchanges: An Introduction to Switching Network Design	60	124
Marwing, K. G. Design Features of the Lee Green Magnetic-Drum Register-Translator	51	137
Matthews, D. H. A Tester for the Coin and Fee Checking Relay-Set	54	230
Matthews, G. A. and Loughhead, W. A. E. An Experimental 3-Digit Electronic Director Using Magnetic-Core Circuits	56	255
Maurer, C. J. Dialling of International Trunk Telephone Calls by United Kingdom Subscribers	54	92
Maurer, C. J., and Newell, E. Integration of the International and Continental Telephone Services	55	22
Maurer, C. J., and Notman, R. A. A Calibrated Signal Generator and Measuring Apparatus for International Signalling Systems	51	180
May, C. A. New Methods of Meter-Pulse Registration	54	168
May, C. A. The Development Relationship Between the Man and the Computer	59	85
Mead, F. G., and Fagg, S. L. F. Practical Aspects of Providing Telephone Plant on New Housing Estates	59	241
Mead, F. G., and Fagg, S. L. F. Providing Post Office Plant on Bridges and Viaducts	58	54
Meatyard, L. R., and Holden, R. Extension of Ongar Radio Station	53	158
Meller, V. C., and Arman, L. T. The South Lancashire Radiophone Service	52	253
Meredith, L. A. A Concentrator for a Telegraph Tape-Relay Network	55	250
Merriman, J. H. H. Men, Circuits and Systems in Telecommunications	60	241
Merriman, J. H. H. The Place of V.H.F., U.H.F., and S.H.F. Radio Links in a Developing Area	56	149
Mildner, C. H., and Thorne, B. F. Aluminium in Telecommunications Cables	51	16
Miles, J. V. Introduction of International Subscriber Dialling from the London Director Area to Paris	56	33
Miles, J. V., and Kelson, D. Signalling System A.C. No. 9	55	51
Miles, J. V., and Turnbull, M. G. Switching Arrangements for International Subscriber Dialling of Calls to Europe	57	75
Millar, J.B. Reinforced-Concrete Radio Towers	58	178
Mills, C. S., and Roberts, W. G. Improvements in Installation Methods for Telephone Exchanges	55	92
Mills, D. E., Elkins, N. A., and Fensome, L. D. W. A Receiver for Direct-Pick-Up Television Links	53	239
Missen, L. A., and Blakey, H. Photographing Subscribers' Meters	55	162
Mitchell, G. An Analogue Computer for Investigating the Directivity Characteristics of Complex Arrays of Unit Aerials	52	246
Moffatt, J. J. and Charlton, E. W. Working Aloft	52	262
Mooney, B. K. The Repair of Shallow-Water Submerged Repeaters	53	9
Moore, M. B. Power Units for Use at Subscribers' Premises	55	49
Moore, M. B., and Gore, J. B. A New Range of Ringing Converters for Subscribers' Apparatus	57	187
Morgan, P. M., Roberts, F. F., and Sanvoisin, R. Some Reliability Studies on Silicon Planar Transistors	57	122
Morris, D. W., Thurlow, E. W., and Genna, W. N. A Microwave Model Equipment for Use in the Study of the Directivity Characteristics of Short-Wave Aerials (Parts 1 and 2)	51	126, 173
Morris, K. W. The International System of Units—SI Units	58	265
Morse, G. E. A Joint-User Cathodic-Protection Scheme	54	95
Morse, G. E., and Jones, F. A New Instrument for the Precise Measurement of Dielectric Loss	58	187
Morton, W. D. Semiconductor Device Developments: Integrated Circuits (Parts 1 and 2)	60	20, 110
Mott, W. W. An Improved Dessicator for Pressurizing Telecommunication Cables—Dessicator, Automatic, No. 1A	60	224
Mumford, A. H. Satellite Communications	55	145
Mumford, Sir Albert Communications in the Public Service of the United Kingdom	56	223
Murray, W. J. A Voice-Frequency Signalling System for Out-of-Area Exchange Lines	60	259
Myers, K., and Skinner., P. H. A Portable Equipment for Analysing Traffic at Non-Director Automatic Telephone Exchanges	52	176
Myers, T. R., and Copping, G. P. Mechanization of the Initial Stages of Processing Mail (Part 1)	52	286
Myerson, R. J. W. St. Margaret's Bay—La Panne 420-circuit Submarine-Cable System with Transistor-Type Submerged Repeaters	60	1

N

Naulls, R. W. The Group Reference-Pilot Signal	55	237
Neill, T. B. M., and Turner, D. The Principles of Negative-Impedance Convertors and the Development of a Negative-Impedance 2-Wire Repeater	51	206
New, A. A. Component Reliability in Post Office Equipment	54	40
New, A. A. Electrolytic Capacitors and Their Reliability	55	115
Newell, E., Bastow, F. J., Collingwood, J. D., and Price, C. K. The Pay-on-Answer Coin-Box System	51	343
Newell, E., and Makemson, A. A. An Electronic Pulse-Duration Analyser	51	64
Newell, E., and Maurer, C. J. Integration of the International and Continental Telephone Services	55	22
Newell, E., and Peacock, R. D. Electronic Telephone Exchanges: Reed-Selector System Field Trial at Belgravia Exchange, London	60	293
Newman, W. L., Blanchard, C. H., and Willett, W. H. The Switching of Television Circuits in London	53	102
Nicolls, A. C., and Harrison, J. C. Recent Improvements in the Inking System of a Recording Decibelmeter	52	26
Notman, R. A., and Maurer, C. J. A Calibrated Signal Generator and Measuring Apparatus for International Signalling Systems	51	180
Nott, H. C., and Chapman, E. W. An Automatic Tester for Subscribers' Lines and Apparatus	51	120

O

O'Brien, E. J. C. The Closing of the Central Telegraph Office	54	186

P

Parsons, A. P., and Didcock, F. E. Recording Decibelmeters	51	145
Pattemore, T. E., and Hatton, G. Application of Program Evaluation and Review Techniques to P.A.B.X. Installation (Part 2)	57	269
Paynter, W. J. W., Procter, W. S., and Rogers, D. M. A New Signalling System for Divisions and Counts in the House of Commons	51	163
Peacock, R. D., and Newell, E. Electronic Telephone Exchanges: Reed-Selector System Field Trial at Belgravia Exchange, London	60	293
Peck, E. J. M., and Arman, L. T. Monitoring Station for Mobile-Radio Services	55	228
Peck, E. J. M., and Arman, L. T. Narrower-Frequency-Band Channels for V.H.F. Land Mobile-Radio Services	55	192
Pendlebury, N. H. A Pulsing and Ringing Machine for U.A.X.s	53	87
Perkins, K. G., and Davies, W. M. The PVR 800 High Frequency (3–30 MHz) Radio Receiver	60	204

	Vol.	Page
Peters, B., and Briggs, E. New Coast Radio Stations	53	170
Piesing, J. E., and Vigar, C. D. Subscriber-Controlled Transfer Service	55	275
Pilling, T., Bartlett, G. A., and Stephens, W. J. B. A Continuous-Reading Harmonic Analyser for Complex 50 c/s Waveforms	53	152
Pilling, T., and Gerard, P. S. Automatic Letter Sorting—The Luton Experiment	54	31
Pilling, T., and Horrocks, P. Coding Desk and Code-Mark Reader for Use with Automatic Letter-Sorting Machines	54	122
Porritt, W. R. A., Hillen, C. F. J., and Long, R. C. The Field Trial of Two Small Electronic Exchanges at Leamington and Peterborough	58	1
Povey, J. A., and Cole, A. C. The Use of Electronic Digital Computers for Telephone Traffic Engineering	58	203
Povey, J. A., and Roberts, W. G. Over-Ceiling Cabling for Telephone Exchanges	54	82
Pratten, L. W., and Adams, H. C. Testing Facilities on Test-Desks in Automatic Telephone Exchanges	53	275
Price, C. K. A Line-Signal Monitoring Unit Using Transistors	53	121
Price, C. K., Bastow, F. J., Collingwood, J. D., and Newell, E. The Pay-on-Answer Coin-Box System	51	343
Price, C. K., Clark, T. H., and Thomson, I. S. A Magnetic-Drum-Type Automatic Traffic Equipment with Transistor Switching Elements	53	50
Price, C. K., and Ireland, W. A. Incoming Core-Type Register-Translator for Director Areas (Parts 1 and 2)	59	119, 183
Priestley, W. D. Pipe-Laying in Tidal Rivers and Harbour Crossings	56	166
Priestley, W. D., and Jennings, S. W. A Novel Way of Providing a Cable Route Across a Busy and Congested Water-way	51	94
Procter, W. S., Rogers, D. M., and Paynter, W. J. W. The New Signalling System for Divisions and Counts in the House of Commons	51	163
Purves, R. F., and Walker, A. The 4, 000-Type Selector	51	168
Pyrah, J. D. Call-Failure Detection Equipment: Interim Equipment for Director and Non-Director Exchanges	60	202

R

	Vol.	Page
Randall, F. L. An Answering Set for Telephone Subscribers	53	45
Randall, F. L., and Ward, S. A. L. A Simplified House Exchange System—House Exchange System No. 3	56	15
Rangecroft, W., Woods, A. E., and Humphries, W. A. The First Subscriber-Trunk-Dialling Installation at Bristol	51	360
Rata, S. Manual Lifting and Handling	53	82
Ratcliffe, K. S., and Lee, K. W. An Audio-Frequency Transmission Measuring Set Using Transistors	55	19
Redburn, L. A., and Stephenson, M. Speaker Equipment for Submarine Cable Systems	54	118
Redman, F. W. G., and Donn, G. S. An Automatic Meter-Observation Equipment	53	124
Rees, T. J. New Training Schemes for Post Office Engineering Youths	56	184
Reid, H. A. Planning Telephone Plant for New Housing Estates	58	234
Rendall, A. R. A., and Halsey, R. J. Prospects for Transatlantic Television by Cable	52	136
Reynolds, F. H., and Holmes, M. F. New Valves for Deep-Water Submerged Telephone-Repeaters	53	98
Reynolds, J., Law, H. B., and Simpson, W. G. Channel Equipment Design for Economy of Band-Width	53	112
Ridgway, W. L., and Rogers, B. H. E. Dry-Reed Relays—Post Office Relays Type 14 and Type 15	58	46
Rigby, D. F., and Jones, D. C. A Transistor Hearing Aid for Bone-Conduction Receivers	57	86
Roberton, J. S. P., and Spencer, H. J. C. A Lightweight Headset for Telephone Operators	53	177
Roberts, F. F., Sanvoisin, R., and Morgan, P. M. Some Reliability Studies on Silicon Planar Transistors	57	122
Roberts, L. W., and Smith, N. G. A Modem for the Datel 600 Service—Datel Modem No. 1A.	59	168
Roberts, W. G., and Mills, C. S. Improvements in Installation Methods for Telephone Exchanges	55	92
Roberts, W. G., and Povey, J. A. Over-Ceiling Cabling for Telephone Exchanges	54	82
Robins, J. M., and Croisdale, A. C. An Electronic Telegraph Buffer Store Using a Magnetic Drum	56	262
Robinson, H. E., and Angell, F. W. Jointing of Cables Containing type 174A Small-Diameter Coaxial Pairs	57	132
Robinson, H. E., and Bishop, K. G. T. Joint-Loading of Local-Line Cables	60	101
Robinson, H. E., and Latimer, E. D. Sheath Jointing of Plastic-Sheathed Cables	59	206
Robinson, J. Saving Space in Telephone Exchanges by Using Modern Power Plants	56	23
Rogers, B. H. E. The Post Office Type 10 Relay	51	14
Rogers, B. H. E., and Knaggs, A. The Post Office Type 12 Relay	57	27
Rogers, B. H. E., and Ridgway, W. L. Dry-Reed Relays—Post Office Relays Type 14 and Type 15	58	46
Rogers, D. M. The London Telex Engineering Control	51	58
Rogers, D. M., Procter, W. S., and Paynter, W. T. W. The New Signalling System for Divisions and Counts in the House of Commons	51	163
Rogers, J. D. The Mechanization of Leeds Parcel-Sorting Office	54	151
Rogers, J. D., and Smith, W. J. Chain Conveyors in Postal Engineering	51	53
Rudeforth, S. Reliability and Maintenance of Electronic Register-Translators	57	167
Rudeforth, S., and Sanders, F. V. The Use of Fault-History Records for the Maintenance of Telephone Switching Mechanisms	58	19
Rudeforth, S., Spears, G., and Stone, M. C. Maintenance Aspects of Subscriber Trunk Dialling	51	369
Russell, P. S., Gorton, B. D., Lumber, A. L., and Cumming, W. S. Pulse-Generating and Tariff-Control Equipment for Periodic Metering	51	324
Ryan, W. A., and Heptinstall, D. L. Metering over Junctions	51	335

S

	Vol.	Page
Sallis, R. T. G. A Device to Replace Conventional Polarized Relays	59	181
Sallis, R. T. G. A Multi Channel Voice-Frequency Telegraph System using Transistors	57	95
Sallis, R. T. G., and Wheele, D. W. E. Detection of Errors in Data Transmission on 50-Baud Telegraph Circuits	58	194
Sander, D. H. A New Power Plant for U.A.X.s No. 12 and 13—Power Plant No. 214	52	265
Sander, D. H. Conveyance of Mail by Electric Vehicles	60	170
Sanders, F. V., and Rudeforth, S. The Use of Fault History Records for the Maintenance of Telephone Switching Mechanisms	58	19
Sands, M. J. E. A New Dial-Pulse Detector	60	300
Sanvoisin, R., Morgan, P. M., and Roberts, F. F. Some Reliability Studies on Silicon Planar Transistors	57	122
Scanlan, W., and Kyme, R. C. Calculation of Current Values for Determining Bus-Bar Sizes in Automatic Telephone Exchanges	57	15
Scantlebury, L. F. External Practices at Post Office Radio Stations	58	77
Scarbrough, R. J. D., Ferguson, K. H., and Searls, A. W. The Generation of Stable Carrier Frequencies in the Range 3,800–4,200 Mc/s	52	125
Scowen, F. Location of Repeater Faults on Submarine Telephone Cables	54	252
Scowen, F. The Equalization During Laying of the Anglo-Swedish Submarine Telephone Cable	54	48
Scowen, F., Taylor, S. A., Thomas, J. F. P., and Walker, D. C. Anglo-Canadian Transatlantic Telephone Cable (CANTAT): Submerged Repeaters, Equalizers and Associated Terminal Equipment	56	76
Searls, A. W., and Corke, R. L. A Clean Room for the Production of Silicon Planar Transistors	59	34
Searls, A. W., Scarbrough, R. J. D., and Ferguson, K. H. The Generation of Stable Carrier Frequencies in the Range 3,800–4,200 Mc/s	52	125
Sellwood, S. J., and Kirkby, R. R. A Portable Emission Tester for Hot-Cathode Mercury-Vapour Rectifiers	57	128
Senior, R. C., and White, P. S. Propane Gas as a Fuel for Small Internal-Combustion Engines	54	265
Senior, R. C., Colyer, J. O., and Tharby, R. Gases in Underground Plant and Their Detection	59	80

	Vol.	Page
Seymour, E. H. A Pay-on-Answer Coin-Box for Subscribers' Installations	54	176
Seymour, E. H. New Cables and Distribution Frames for Block-Wired Buildings	58	225
Seymour, E. H. New Designs of Furniture for Use in Engineering Installation Offices	54	57
Seymour, E. H. New Lower-half Wallboards for Pay-on-Answer Coin-Boxes in Public Call Offices	54	175
Seymour, E. H., and Turner, G. Selective Voice-Frequency Signalling for Motorway Emergency Telephone Systems	55	181
Shanks, P. H. A New Echo Suppressor for Long-Distance Communications	60	288
Sheppard, N. F., and Marchington, A. Quality Control of Brazed Seals in Deep-Sea Repeaters	60	44
Sheppard, S. H. Local Register for Director Exchanges	51	301
Sheppard, S. H. The Leighton-Buzzard Electronic Telephone Exchange	59	255
Sheppard, S. H., and Waters, H. S. Incoming Register-Translator for Director Areas	51	303
Simpson, W. G., Law, H. B., and Reynolds, J. Channel Equipment Design for Economy of Bandwidth	53	112
Sixsmith, J., and Endersby, J. C. Coaxial Line Equipment for Small-Diameter Cables	55	44
Sixsmith, J., and Lloyd, H. F. A Television-Network Switching Equipment to 625-Line Colour Standards	60	199
Skingle, G. D., and Spanton, J. C. Test Equipment for the Datel Services—Datel Testers No1A. 2A and 2B	59	262
Skinner, P. H., and Myers, K. A Portable Equipment for Analysing Traffic at Non-Director Automatic Telephone Exchanges	52	176
Slater, G. H. A Vehicle for Radio Investigation Work	53	34
Slight, J. R., and Deadman, D. J. A. New Approach to the Duct-Rodding Problem—Ductmotor No 1	58	91
Smith, G. L., and Huggins, G. Recording and Control of Information-Service Announcements	55	158
Smith, G. W. Improved Type of Corrugated Band for Twin-Band Risers	58	164
Smith, N. D., and Hanman, B. L. G. Birmingham Radio Tower	58	182
Smith, N. G. An Introduction to the Post Office Datel Services	59	1
Smith, N. G. and Roberts, L. W. A Modem for the Datel 600 Service—Datel Modem No. 14	59	108
Smith, N. G., and Tridgell, R. H. Performance of the Datel Modem No. 1A	59	250
Smith, W. J., and Rogers, J. D. Chain Conveyors in Postal Engineering	51	53
Snow, H. F., and Bluring, J. Experiments in Aerial-Cable Construction	52	47
Sowton, C. W. Radio Interference (Part 6)	52	43
Sowton, C. W., and Britton, G. A. C. R. Radio Interference (Part 5)	51	202
Spanton, J. C., and Skingle, G. D. Test Equipment for the Datel Services—Datel Testers No. 1A, 2A and 2B	59	262
Spears, G., Rudeforth, S., and Stone, M. C. Maintenance Aspects of Subscriber Trunk Dialling	51	369
Speight, E. A., and Lynch, A. C. A Photo Electric Device for Measuring Cable Diameter During Extrusion	57	79
Spencer, H. J. C. A Table Telephone with Four Push-Button Keys—Telephone No. 710	53	190
Spencer, H. J. C., and Roberton, J. S. P. A Lightweight Headset for Telephone Operators	53	177
Spencer, H. J. C., and Wilson, F. A. The New 700-Type Table Telephone—Telephone No. 706	52	1
Spratt, C. J., and Harris, E. T. C. An Improved Form of Mechanical Construction for Transmission Equipment—51-Type Construction	51	197
Spurgin, D. A. The Lighting of Telephone Apparatus Repair Benches	54	274
Stallworthy, F. A., McLusky, R. F., and Walker, N. Transit Switching Centres Using BXB1121 Crossbar Equipment (Part 1)	60	302
Stenson, D. W. The Manufacture of Earthenware Ducts	56	231
Stenson, D. W., and Clinch, C. E. E. Housing of Repeater Equipment Underground	56	158
Stephens, W. J. B., Pilling, T., and Bartlett, G. A. A Continuous-Reading Harmonic Analyser for Complex 50 c/s Waveforms	53	152
Stephenson, M., and Fiddes, R. G. Air-Conditioning in Computer Accomodation	57	39
Stephenson, M., and Redburn, L. A. Speaker Equipment for Submarine Cable Systems	54	118
Stone, M. C., Spears, G., and Rudeforth, S. Maintenance Aspects of Subscriber Trunk Dialling	51	369
Stotesbury, K. E., and Byrne, S. H. L. The London International Maintenance Centre	52	96
Stott, J. An Optical Height-Measuring Instrument	54	250
Stratton, J., and Tobin, W. J. E. A New Switching and Transmission Plan for the Inland Trunk Network	53	75
Stringer, J. B. Sorting Techniques for Automatic Computers	53	181

T

	Vol.	Page
Tanner, R. K. R. Testing 625-Line Monochrome and Colour Television Transmission Systems (Parts 1 and 2)	58	126, 165
Tattersall, R. L. O. Frequency-Meter Operating in the H_{011} Mode in the Range 3,975-4,275 Mc s	52	129
Taylor, F. J. D. Equipment and Testing Facilities at the Experimental Satellite Ground Station. Goonhilly Downs, Cornwall.	55	105
Taylor, F. J. D. Large Steerable Microwave Aerials for Communication with Artificial Earth Satellites	55	152
Taylor, F. J. D. The HS-303 Communications Satellite Project	57	221
Taylor, F. J. D., and Bray, W. J. Preliminary Results of the Project TELSTAR Communication Satellite Demonstrations and Tests: 10–27 July, 1962	55	147
Taylor, P. Materials and Fire Hazards	59	16
Taylor, P. E. The Testing of Plastics	56	280
Taylor, S. A., and Groves, H. J. A Differential Gain Monitoring Panel for Testing Submerged Telephone Repeaters	51	132
Taylor, S. A., Thomas, J. E. P., Walker, D. C., and Scowen, F. Anglo-Canadian Transatlantic Telephone Cable (CANTAT): Submerged Repeaters, Equalizers and Associated Terminal Equipment	56	76
Tharby, R., Senior, R. C., and Colyer, J. C. Gases In Underground Plant and Their Detection	59	80
Tharby R., and White, P. S. Portable Electric Power Equipment and Tools for External Engineering Work	57	226
Thomas, A. W., and Collings, E. R. Four New Engineering Vehicles	53	257
Thomas, J. F. P. Components and Materials for Submarine Repeaters	57	158
Thomas, J. F. P., Walker, D. C., Scowen, F., and Taylor, S. A. Anglo-Canadian Transatlantic Telephone Cable (CANTAT): Submerged Repeaters, Equalizers and Associated Terminal Equipment	56	76
Thompson, S. Development of Postal Self-Service Machines	52	272
Thomson, D. A Speech Compandor Using Junction Transistors	55	14
Thomson, D. Transistor Line Amplifiers for Speech and Program Circuits	54	238
Thomson, I. S. Clark, T. H., and Price, C. K. A Magnetic-Drum-Type Automatic Traffic Equipment with Transistor Switching Elements.	53	50
Thomson, W. E. The Post Office Engineering Department's Computer—Its Use in Research	56	133
Thomson, W. E., and Breary, D. Planning London's Future Telephone Network by Computer	59	167
Thorne, B. F., and Mildner, C. H. Aluminium in Telecommunications Cables	51	16
Thurlow, E. W., and Lelliott, S. R. Path Testing for Microwave Radio-Relay Links	58	26
Thurlow, E. W., Morris, D. W., and Genna, W. N. A Microwave Model Equipment for Use in the Study of the Directivity Characteristics of Short-Wave Aerials (Parts 1 and 2)	51	126, 173
Thwaite, H., and Aspinall, E. A Transistor Hearing Aid	52	163
Tite, L. G. On-Site Adjustment Checks of Telephone Exchange Equipment Installed by Contract	57	243
Tobin, W. J. E. The Signalling and Switching Aspects of the Trunk Transit Network	60	165
Tobin, W. J. E., and Francis, H. E. The Next Steps	51	373
Tobin, W. J. E., and Stratton, J. A New Switching and Transmission Plan for the Inland Trunk Network	53	75

	Vol.	Page
Tridgell, R. H., and Smith, N. G. Performance of the Datel Modem No. 1A.	59	250
Troke, F. E. A New Watch Receiver—Receiver, Watch, No. 8T	56	230
Troke, F. E. Field Trial of the Trimphone—Telephone No. 712	58	8
Tucker, A. A. Long-Distance Private Telephone Circuits for Commercial Renters	55	187
Turnbull, M. G. Introduction of Semi-Automatic Operation of Continental Telephone Services	52	89
Turnbull, M. G., and Miles, J. V. Switching Arrangements for International Subscriber Dialling of Calls to Europe	57	75
Turner, D. Equipment for the Measurement of Some Characteristics of the Noise in Telephony and Television Channels	55	231
Turner, D., and Neill, T. B. M. The Principles of Negative-Impedance Convertors and the Development of a Negative-Impedance 2-Wire Repeater	51	206
Turner, G. Emergency Telephones for the London–Yorkshire Motorway	52	243
Turner, G., and Seymour, E. H. Selective Voice-Frequency Signalling for Motorway Emergency Telephone Systems	55	181
Turner, R. J. Experimental Equipment for Measuring Group Delay in the Frequency Band 3.8–4.2 Gc/s	52	207
Tyrrell, W. The Development of a Box-Building Vehicle	60	131
U		
Urben, T. F. A., and Haley, G. An Automatic Screw-Sorting Machine	57	32
V		
Vigar, C. D. Central Service-Observation Equipment Using a Transistor-Controlled Motor-Uniselector	54	9
Vigar, C. D. The Use of Transistors in Conjunction with Relay Switching Circuits	57	199
Vigar, C. D. Trunk-Traffic Analysis Equipment	58	253
Vigar, C. D., and Piesing, J. E. Subscriber-Controlled Transfer Service	55	275
Vogan, D. H., and Benson, D. L. Controlling Register-Translators (Parts 3 and 4)	51	280, 291
Vogel, E. C., and Axe, G. A. Replacement of the World's First Traffic-Carrying Submerged Repeater	58	32
W		
Waldie, F. A., and Walker, E. V. Soft-Soldering to Gold-Plated Surfaces	58	268
Walker, A., and Purves, R. F. The 4,000-Type Selector	51	168
Walker, A. D. Primers for Paint Systems	57	101
Walker, D. C., Scowen, F., Taylor, S. A., and Thomas, J. F. P. Anglo-Canadian Transatlantic Telephone Cable (CANTAT): Submerged Repeaters, Equalizers and Associated Terminal Equipment	56	76
Walker, E. V., and Waldie, F. A. Soft-Soldering to Gold-Plated Surfaces	58	268
Walker, N. Controlling Register-Translators (Part 1)	51	268
Walker, N. Periodic Metering	51	320
Walker, N. Stallworthy, F. A., and McLusky, R. F. Transit Switching Centres Using BXB1121 Crossbar Equipment (Part 1)	60	302
Walker, R. R. The New Post Office Speaking Clocks	56	1
Walters, J. R., Keep, J. F., and Craggs, J. F. Pressurization of Telecommunications Cables (Part 1)	55	260
(Parts 2 and 3)	56	25, 129
Walters, J. R., and Fernie, J. B. Submarine-Cable Earth-Electrode Systems	57	105
Ward, S. A. L., and Randall, F. L. A Simplified House Exchange System—House Exchange System No. 3	56	15
Ward, W. C. A Line-Construction Vehicle	55	226
Ward, W. C. A Short History of Codes of Practice for the Opening and Restoration of Trenches in Public Streets	51	108
Wase, A. E. N. Cooling System for High-Power Radio Transmitters	55	40
Wase, A. E. N., and Jackson, B. S. The New Leafield Radio Station (Part 4)	59	267
Waters, H. S., and Sheppard, S. H. Incoming Register-Translator for Director Areas	51	303
Watkins, A. H. 'Better Opportunities in Technical Education'	56	13
Watt-Carter, D. E. Dismantling the Long-Wave Masts at Leafield Radio Station	55	129
Watt-Carter, D. E. Reflectometers	54	37
Watt-Carter, D. E. The New Leafield Radio Station (Part 1)	59	130
Watt-Carter, D. E., and Wheeler, L. K. The Lincomplex System for the Improvement of H. F. Radio-Telephone Circuits	59	163
Weaver, A. L., Fox, W. H., and Ashwell, J. L. K. Subscribers' 50-Point Linefinder System	51	81
Welch, S. Line and Register Signalling System for Dialling over Transoceanic Telephone Cables	56	111
Welch, S. Signalling Arrangements for Dialling over the Transatlantic Telephone Cables	53	201
Wheele, D. W. E., and Collier, E. G. Telegraph Distortion on Physical (D. C.) Lines and Telegraph Machines	52	61
Wheele, D. W. E., and Sallis, R. T. G. Detection of Errors in Data Transmission on 50-Baud Telegraph Circuits	58	194
Wheeler, L. K., and Frost, A. C. Telegraph Distortion in the Trunk Network of the Telegraph Automatic Switching System	52	103
Wheeler, L. K., and Watt-Carter, D. E. The Lincomplex System for the Improvement of H. F. Radio-Telephone Circuits	59	163
Wherry, A. B. Recent Developments in Automatic Telephone Exchange Trunking	54	157
White, P. S., and Senior, R. C. Propane Gas as a Fuel for Small Internal-Combustion Engines	54	265
White, P. S., and Tharby, R. Portable Electric Power Equipment and Tools for External Engineering Work	57	226
Whitton, E. H., and Gibbon, R. D. Parcel-Label Printing and Issuing Machines	52	218
Whyte, J. S. Pulse, Code Modulation (Part 1)	54	86
Whyte, J. S., and Ford, A. E. An Insertion-Loss Display and Recording Equipment for the Frequency Range 50 kc/s–8 Mc/s	53	145
Wilcock, A., and Baxter, E. C. Fleet (London) Automatic Telex Exchange	54	53
Willett, W. H., Blanchard, C. H., and Newman, W. L. The Switching of Television Circuits in London	53	102
Williams, F. E., and Ayers, E. W. Human Factors in Telephony	60	174
Williams, F. E., and Ithell, A. H. A New Artificial Ear	60	47
Williams, H. The Commonwealth Telecommunications Conference 1965–1966	59	116
Williams, J. Electric Underfloor Heating	56	181
Williams, M. B. The Characteristics of Telephone Circuits in Relation to Data Transmission	59	151
Willmot, J. W. An Introduction to Printed Circuits and their Application to Telecommunications	52	170
Wilson, F. A., and Lowe, W. T. A Loudspeaking Telephone without Voice Switching—Loudspeaking-Telephone No. 1	54	1
Wilson, F. A., and Spencer, H. J. C. The New 700-Type Table Telephone—Telephone No. 706	52	1
Wilson, Sylvia J., and Henderson, J. C. Design and Technology of Silicon Planar Transistors	56	239
Wilson, W. T., and Fagg, S. L. F. Laying Plastic Ducts by Moleplough	59	104
Wilson, W. T., and Haines, G. E. Developments in Overhead Construction	57	260
Windle, R. W., and Cosier, J. E. H. X-Ray Inspection of Polythene-Insulated Submarine-Cable Joints and Gland Mouldings	60	280
Winterborn, E. E. L. Plastics in Cables	51	33
Woods, E. A., Rangecroft, W., and Humphries, W. A. The First Subscriber-Trunk-Dialling Installation at Bristol	51	360
Wood, F. W. Panel-Mounted Cordless P.M.B.X. Switchboards	58	23
Wood, F. W., Bluett, R. J., and Calkin, S. W. A Remote-Control System for Country Fire Brigades	57	233
Wood, R. A., Barnard, A. J., and Benson, D. L. Controlling Register-Translators (Part 2)	51	272
Wooding, R. S. G. Automatic Switching of Inland Carrier-Link Sections of Transatlantic Telephone Cable Systems	56	237
Woolley, F., and King, R. E. The Repair of Faulty Loading Pots	59	5
Wylie, G. A. Equipment for Training Letter-Sorting-Machine Operators	52	55
Y		
Young, E. J., and Feasey, R. J. Modifications to Aluminium-Alloy Ladders	53	80
Young, S. G. A 150-Foot Mast for Radio Stations	53	271

Regional – Note Index

	Vol.	Page
A		
Aerial Cable on Bucket Ropeway, Erection of	58	142
Aerial-Cable Route, Re-alignment of	52	230
Aerial Cable and 33 kV-Line Crossing, An Insulated	51	243
Airdrie Non-Director Exchange, Opening of	53	65
Aldershot (Hants), New Repeater Station and Non-Director Automatic Exchange at	53	209
Altrincham Automatic Telephone Exchange	55	281
Altrincham Automatic Telephone Exchange, Ground-Level Lead-in at	53	67
Ambergate Electronic Exchange	60	77
Avenue Telephone Exchange: Renewal of Main Batteries	54	279
B		
B 1-Type Building, A New	55	63
Bakewell Non-Director Exchange	57	212
Beauchief (Sheffield) A. T. E., Flooding of	51	245
Belfast, Construction of Non-Standard Manhole Outside Telephone House,	52	227
Belfast–Enniskillen Trunk Route, Application of S.S.D.C. No. 2 Equipment to the	54	62
Belfast, Heating and Lighting of St. George's Branch Post Office,	52	76
Belfast New Civil Airport	56	288
Belfast, New Telephone Managers' Office for	60	76
Birchfield (Birmingham) Underpass, Cable Diversions–	54	281
Birmingham, A New Cable and Wireless Office at	56	140
Birmingham Automatic Telex Exchange	53	137
Birmingham, Flooding in Telephone House,	59	140
Birmingham New Television Network Switching Centre	57	284
Birmingham, Tunnelling by Pipe Thrusting in	60	310
Block-Release Course Results—Lancaster Area	57	283
Bournemouth Automatic Exchange	52	150
Bournemouth–Jersey Submarine Cable	51	243
Bradford, Field Trial of Terylene Rope for Cabling Operations in	51	248
Bramhall Manual Exchange, Recover of	58	282
Brass Tacks	59	225
Brecon, Slewing and Lowering of Duct Track at	56	60
Brewood, Lighting Damage at	52	230
Bridge Collapse at Wilsontown	57	62
Bridge Support for a Multiple-Duct Track, Temporary	54	283
Bridgwater Head Post Office Foundation Stone	60	311
British Empire and Commonwealth Games, Telecommunication Arrangements for the Sixth	51	240
British Road Services Push-Button Torn-Tape Relay System	51	72
Bromborough Village, Repositioning of Cross-Connexion Cabinet at	56	139
Building, A New B1-Type	55	63
Building for Telephone Exchanges, K-Type	55	210
Burnley Exchange Rearrangements	60	237
C		
Cabinet at Bromborough Village, Repositioning of Cross Connexion	56	139
Cabinet Removal, In-Situ	56	281
Cable across Morecombe Bay, Submarine	56	286
Cable and 33 kV Line Crossing, An Insulated Aerial	51	243
Cable at Widemouth Bay, The Landing of the Shore-End of TAT-3 Submarine	56	215
Cable, Bournemouth–Jersey Submarine	51	243
Cable Chamber Around an Existing Lead-in, Building a	52	149
Cable Chamber at Mevagissey, Overground	52	230
Cable Chamber, Crescent	52	302
Cable Crossing at Corpach, Caledonian Canal	57	283
Cable Diversions–Birchfield (Birmingham) Underpass	54	281
Cable, Experiment in Laying Long Lengths of Polythene	55	211
Cable, Fowey–Polruan Submarine	60	236
Cable, Old-Type Telegraph	52	122
Cable on Bucket Ropeway, Erection of Aerial	58	142
Cable, Unusual Damage to Coaxial	56	214
Cables at Grangemouth Exchange, Unusual Corrosion in Lead-in	60	310
Cables, Damage to Underground	51	241
Cables, Experimental Polythene	54	279
Cabling at Chester, Long-Length	57	63
Cabling in Steel Works	51	242
Caledonian Canal Cable Crossing at Corpach	57	283
Call-Out System for Firemen, A New	58	215
Cambridge (Trumpington) Repeater Station, Subway at	53	278
Card-Filing Rack, A Compact	57	212
Cardiff–Penarth Road Toll Bridge Replacement	56	138
Carlisle–Belfast Broadband Radio-Relay System	53	64
Carlisle–Belfast Radio Link, Erection of Tower at Ballygomartin for the	52	227
Carno, Lightning Damage at	55	210
Cathodic-Protection Scheme, Joint	51	244
Central Telegraph Office (C.T.O.) Pneumatic System, Closing down of the	56	138
Chester, Long-Length Cabling at	57	63
Chesterfield Exchange, Manual Relief at	52	76
Citadel Exchange, The London	54	211
City Area, The Introduction of S.T.D.in the	54	211
Cleaning Apparatus, Two-Motion Switch-	55	136
Closed-Circuit Television at the University of Leeds	60	156
Closing down of the Central Telegraph Office (C.T.O.) Pneumatic System	56	138
Coaxial Cables Damaged by a Burst Hydraulic Water Main	57	62
Coaxial Cable, Desiccating a	52	77
Coaxial Cable, Unusual Damage to	56	214
Coleshill U.A.X. 14, Fire at	60	311
Collapse of Hatfield Bridge	59	140
Collapse of Steel Poles at Ropley	56	140
Colour-Television Outside Broadcast, Medical	55	281
Compact Card-Filing Rack, A	57	212
Construction of Non-Standard Manhole Outside Telephone House, Belfast	52	227
Contact with 132 kV Grid Line	51	152
Conway River, A New Bridge Over	52	153
Corpach, Caledonian Canal Cable Crossing at	57	283
Crescent Cable Chamber	52	302
Cwmcarn Factory, New Boiler Plant at the Factories Department's	56	60
D		
Damage Caused by Woodpeckers	57	211
Damage to Coaxial Cable, Unusual	56	214
Damage to the High Wycombe–London No. 2 Cable	57	284
Dawley New Town	59	225
Direct Labour, Non-Director Automatic Exchange Installed by	53	139
Disabled Subscriber, Telephone Service for a Seriously	54	282
Doncaster Motorway	54	62
Drop-Wire Construction, Light-Weight	51	242
Duct Across Poole Harbour, Subaqueous Steel	55	210
Duct at Sheffield, Pitch-Fibre	55	282
Duct-Blockage, An Oolitic	53	137
Duct by Moleplough, Laying Plastic	59	62
Duct Section, Rodding and Roping a 500-yard	58	282
Duct Track at Brecon, Slewing and Lowering of	56	60
Duct Track, Temporary Bridge Support for a Multiple-	54	283
Ducts, Removing Silt Obstruction from	52	229
Duct Control in Telephone Exchanges	55	63
E		
Early Transmission Equipment	58	281
Electric-Light Installation in a Large Building, A Method of	52	148
Elmbridge Exchange Transfer	59	141
Elmdon Airport, Thrust Boring at	52	152
Emergency Telephones Along the London–Yorkshire Motorway in the Coventry Area, The Provision of	53	65
Erection of Aerial Cable on Bucket Ropeway	58	142
Erection of Crane Tower at Tinshill Radio Station (Leeds)	59	225
Evesham, S. T. D. at	53	66
Experimental Flexibility Units	58	215
Experimental Lead-in at Knutsford Automatic Telephone Exchange	54	283
Explosion at Selly Oak Repeater Station	53	138
Explosion at Takely UAX 13	56	61
Explosion Risks	54	63

	Vol.	Page
F		
Factories Department's Cwmcarn Factory, New Boiler Plant at the	56	60
Failure, Mossfennan Repeater Station	56	139
Falmouth, Removal of a Working Mobile Non-Director Exchange at	52	299
Field Trial of Push-Button Telephones	59	63
Fire at Coleshill U.A.X. 14	60	310
Fire at Preston Exchange (Brighton Area)	54	211
Fire at Worcestershire Police Headquarters	60	76
Firemen, A New Call-Out System for	58	215
First Small Automatic Exchange in Northern Ireland in Service at Grey-Abbey, Co. Down	59	225
Flexibility Units, Experimental	58	215
Flood, Morpeth	56	139
Flooding in Telephone House, Birmingham	59	140
Fowey–Polruan Submarine Cable	60	236
Freak Storm in Lancashire	57	211
G		
Gas Explosion at Worcester	58	283
Gas Explosion, Renewal of Underground Plant Damaged by	56	287
Gatwick Airport	51	238
General Election Television Broadcasts, The	52	301
Glasgow Director Exchanges Get S.T.D.	54	211
Glasgow, Moving the Position of the 50-Volt Power Plant at Telephone House	51	381
Grangemouth Exchange, Unusual Corrosion in Lead-in Cables at	60	310
Great North Road, Post Office Work on the	54	281
Green Lowther, Lightning Damage at	57	140
Grey-Abbey, Co. Down, First Small Automatic Exchange in Northern Ireland in Service at	59	225
H		
Halifax, Unusual Method of Replacing Auto-Manual Switchboards at	51	247
Harwell, F. A. B. X. No. 4 at	58	65
Hatfield Bridge, Collapse of	59	140
Heating and Lighting of St. George's Branch Post Office, Belfast	52	76
High-Wycombe Automatic Telephone Exchange	59	62
High Wycombe–London No. 2 Cable, Damage to the	57	284
Historic Island has Telephone Restored	56	216
Hole in the Road, A	56	138
Horsham, Storm Damage at	52	76
Horwich V.H.F. Station	52	228
Huddersfield Telephone Service, Modernization of the	57	139
I		
Icing Conditions, Unusual	52	153
Icing of Overhead Wires in the Gloucester Area	52	151
Inaugural Call via Telstar	56	61
In-situ Cabinet Removal	58	281
Installation of Expedient Racks in Telephone Exchanges	60	157
Interference Problem at Peterborough, A Television	55	136
International Switching Centre Wood Street	59	299
International Telex Switchboard, C.T.O., Extension of the	52	301
Introduction of Teleprinter Automatic Switching at the English Electric Co. Ltd., Stafford	57	64
Involuntary Blackout, An	57	212
J		
Jointing Posts, Trial of Above-Ground	57	139
K		
K-Type Buildings for Telephone Exchanges	55	210
Kidderminster Inner Ring Road	60	158
Kirkcaldy Non-Director Auto-Manual Centre	59	225
Knutsford Automatic Telephone Exchange, Experimental Lead-in at	54	283
L		
Lancashire, Freak Storm in	57	211
Lancaster Area, Block-Release Course Results—	57	283
Lancaster, Unusual River Crossing at	55	209
Landing of the Shore-End of TAT-3 Submarine Cable at Widemouth Bay, The	56	215
Laying Plastic Duct by Moleplough	59	62
Leeds Lower Ring-Road	58	64
Leeds, Introduction of S.T.D. in	55	282
Leicester, New Telephone Exchange at	54	62
Lifting Chains for Manhole Frames and Covers	51	244
Lightning Damage at Berwood	52	230
Lightning Damage at Carno	55	210
Lightning Damage at Green Lowther	57	140
Lightning Protector, A New Design of	55	208
Lincoln Automatic Telephone Exchange	52	148
London–Yorkshire Motorway in the Coventry Area, The Provision of Emergency Telephones Along the	53	65
Long-Distance Area, A Year of Activity in	55	64
Long-Length Cabling at Chester	57	63
Lostwithiel, Historic Find at	53	136
Lowestoft, New Automatic Telephone Exchange at	55	63
M		
Maintenance Problem, A Novel Solution to a	59	61
Manchester, Trunk Mechanization	52	77
Manchester, Trunk Mechanization	53	67
Manholes in Salford, Two-Level	59	226
Manhole Outside Telephone House, Belfast Construction of Non-Standard	52	227
Manhole, Rebuilding Pollards Exchange	57	62
Medway Bridge on the M2 Motorway, The	57	64
Mevagissey, Overground Cable Chamber at	52	230
Middlesborough New Telephone Exchange, The	52	303
Middlesborough, Recovery of a Repeater Station at	52	303
Midland Region's Last Magnet Exchange, The	52	300
Mill Bridge, Doncaster, Reconstruction of	51	246
Miniature Public-Address System	60	77
Modernization of the Huddersfield Telephone Service	57	139
Moleplough, Laying Plastic Duct by	59	62
Morecombe Bay, Submarine Cable Across	56	286
Morpeth Flood	56	139
Mossfennan Repeater Station Failure	56	139
Motorway, The Medway Bridge on the M2	57	64
Motorway, Thrust-Boring on the M6	56	286
N		
National Coal Board, Unusual Circuits for the	51	242
Neath River Bridge—Diversion of Post Office Cables	52	78
New Boiler Plant at the Factories Department's Cwmcarn Factory	56	60
New Cable and Wireless Office at Birmingham, A	56	140
New Call-Out System for Firemen, A	58	215
New Design of Lightning Protector, A	55	208
New Telephone Manager's Office for Belfast	60	76
New Western District Sorting Office, The	58	283
Newcastle City Centre, Road Works on the A1 at	57	283
Northwood Automatic Telephone Exchange, Opening of	55	64
No-Tone Detector, A	59	61
Nottingham, Trunk Mechanization	51	380
Novel Method for Shifting Batteries	58	282
Novel Solution to a Maintenance Problem, A	59	61
O		
Ongar Radio Station, Replacement of Standby Generating Plant at	51	73
Opening of Sheffield 'Cutler'	59	299
Orkney Cable Recoveries	59	300
Outside-Broadcast Arrangements for the Royal Wedding, 6 May 1960	53	134
Outside-Broadcast Television Circuit, An Unusual	52	151
Over-Ceiling Cabling at a UAX14 in the Peterborough Area	58	65
Overhead Recovery Unit	53	64
P		
P.A.B.X. No. 4 at Harwell	58	65
Park in the Sheffield Area, U.A.X. 13XX Extension on a Siemens 16 Satellite Exchange at	51	245
Pay-on-Answer Coin Boxes—Mobile Demonstration Unit	55	136
Peldon U.A.X. 13, Removal of	60	311
Peterborough, A Television Interference Problem at	55	136
Peterborough Area, Over-Ceiling Cabling at a U.A.X. 14 in the Peterborough Area	58	65
Pipes, Cutting Steel	54	278
Pitch Fibre Duct at Sheffield	55	282
Pneumatic System, Closing Down of the Central Telegraph Office (CTO)	56	138

	Vol.	Page
Poles at Ropley, Collapse of Steel	56	140
Pollards Exchange Manhole, Rebuilding	57	62
Polythene Cable, Armoured	53	136
Polythene Cable, Experiment in Laying Long Lengths of	55	211
Polythene Cables, Experimental	54	279
Poole Harbour, Subaqueous Steel Duct Across	55	210
Portable Relief Trunk Switchboards	59	61
Post Office Railway—Change to Mercury-Arc Rectifiers	52	300
Preston Exchange (Brighton Area), Fire at	54	211
Programmed Learning and its Use for the Trimphone	59	63
Protector, A New Design of Lightning	55	208
Provision of Telephone Service at the Royal Agricultural Show 1963.	56	214
Public Relations at Sheffield, An Experiment in	52	148

R

Radio-Station (Leeds), Erection of Crane Tower at Tinshill	59	225
Rebuilding Pollards Exchange Manhole	57	62
Recording of Ineffective Calls Made to Engaged Lines	59	300
Recovery of a Repeater Station at Middlesbrough	52	303
Recovery of Bramhall Manual Exchange	58	282
Recovery of Telephone Poles	53	137
Relief of Skelmersdale, The	60	236
Removal of a Battery Hut	59	226
Removal of a Working Mobile Non-Director Exchange at Falmouth	59	299
Removal of Peldon U. A. X. 13	60	311
Renewal of Underground Plant Damaged by Gas Explosion	56	287
Repositioning of Cross-Connexion Cabinet at Bromborough Village	56	139
River Taff at Pontypridd, Installation of Four Spun Cast-Iron Pipes Across the	51	240
Roadworks in South Scotland	54	284
Roadworks on the A1 at Newcastle City Centre	57	283
Rocket-Assisted Maintenance	60	158
Rodding and Roping a 500-yard Duct Section	58	282
Ropley, Collapse of Steel Poles at	56	140
Ross Spur, The	54	142
Royal Visit to Post Office Savings Bank	54	280
Royal Wedding, 6 May 1960, Outside-Broadcast Arrangements for the	53	134
Royal Wedding, The	54	210

S

S. T. D. at Evesham	53	66
S.T.D. at Watford, Introduction of	53	210
S.T.D. Comes to Scotland	53	209
S.T.D., Glasgow Director Exchanges Get	54	211
S.T.D. in Leeds, Introduction of	55	282
S.T.D. in the City Area, The Introduction of	54	211
Salford, Two-Level Manholes in	59	226
Scotland, S.T.D. Comes to	53	209
Selly Oak Repeater Station, Explosion at	53	138
Severn Bridge and Wye Viaduct	60	77
Severn Tunnel, Renewal of Cable Bearers in the	54	212
Sheffield, An Experiment in Public Relations at	52	148
Sheffield 'Cutler', Opening of	59	299
Sheffield, Pitch-Fibre Duct at	55	282
Shell International Petroleum, P.A.B.X. for London Office of	54	280
Ship-in-Dock Telephone Service in 'Danger Areas'	54	142
Shoreditch Automatic Telex Exchange, Opening of	51	379
Silt Obstruction from Ducts, Removing	52	229
Skelmersdale, The Relief of	60	236
Slewing and Lowering of Duct Track at Brecon	56	60
Small Automatic Exchange in Northern Ireland in Service at Grey-Abbey, Co. Down, First	52	225
Stafford, A New Exchange at	54	282
Stamford Exchange, The M.D.F. at the New	55	208
Stoke City Automatic Telephone Exchange, Floor-Lowering at	53	210
Storm Damage at Horsham	52	76
Submarine Cable across Morecombe Bay	56	286
Subsidence Near a 70-Way Track	55	209
Subsidence, Telephone Exchanges in Areas Liable to	51	72
Switch-Cleaning Apparatus, Two-Motion	55	136

T

TAT-3 Submarine Cable at Widemouth Bay, The Landing of the Shore end of	56	215
Takely U.A.X.13, Explosion at	56	61
Telegraph Cable, Old-Type	52	152
Telephone, Field Trial of Push-Button	52	63
Telephone 706, Warped Case of a	55	136
Teleprinter Automatic Switching at the English Electric Co. Ltd., Stafford, Introduction of	57	64
Television at the University of Leeds, Closed Circuit	60	156
Television Circuit, An Unusual Outside Broadcast	52	151
Television, Closed-Circuit	54	281
Television Interference Problem at Peterborough, A.	55	136
Television Links, Temporary	54	142
Television Network Switching Centre Birmingham, New	57	284
Television, Outside Broadcast Medical Colour-	55	281
Telex Exchange, Birmingham Automatic	53	137
Telex Exchange, Opening of Shoreditch Automatic	51	379
Telex Switchboard, C.T.O., Extension of the International	52	301
Telstar, Inaugural Call via	56	61
Terylene Rope for Cabling Operations in Bradford, Field Trial of	51	248
Thrust Borer, Use of Chains Instead of Rods With	51	245
Thrust Boring at Elmdom Airport	52	152
Thrust-Boring on the M. 6. Motorway	56	286
Thrust-Boring Operation, Unexpected Result of a	52	152
Thrusting in Birmingham, Tunnelling By Pipe	60	310
Time Assignment Speech Interpolation Equipment at Faraday Building, Installation of	53	136
Tinshill Radio Station (Leeds), Erection of Crane Tower at	59	225
Training Courses for Leading Draughtsmen, Organization and Supervision of	53	135
Training, Engineering	55	64
Transmission Equipment, Early	58	287
Transportable Apparatus Hoist, A	60	157
Trial of Above-Ground Jointing Posts	57	139
Trimphone, Programmed Learning and its Use for the	59	63
Trunk Mechanization, Manchester	52	77
Trunk Mechanization, Manchester	53	67
Trunk Mechanization, Nottingham	51	241, 380
Tunnelling by Pipe Thrusting in Birmingham	60	310
Two-Level Manholes in Salford	59	226

U

U.A.X. No. 12, Removal of Complete	52	154
U.A.X. 13XX Extension on a Siemens 16 Satellite Exchange at Park in the Sheffield Area	51	245
Underground Plant Damaged by Gas Explosion, Renewal of	56	287
Unilever Group of Companies, 1, 700-Line P.A.B.X. No. 3 for the	52	151
Unusual Corrosion in Lead-in Cables at Grangemouth Exchange	60	310
Unusual Damage to Coaxial Cables	56	214
Unusual Duct and Manhole Problem	60	156

W

Walsall Exchange Transfer	53	210
Wasps' Nest in Footway Box	52	302
Watford, Introduction of S.T.D. at	53	210
Watford New Automatic Exchange	51	379
Western District Sorting Office, The New	58	283
Widemouth Bay, The Landing of the Shore-End of the TAT-3 Submarine Cable at	56	215
Wilsontown, Bridge Collapse at	57	62
Woking Mobile Non-Director Relief Exchange	56	215
Woodcroft Trunk Non-Director Exchange	58	215
Wood Street, International Switching Centre at	59	299
Worcester, Gas Explosion at	58	283
Worcestershire Police Headquarters, Fire at	60	76

Senior Staff Appointments

	Vol.	Page
A		
Anderson, E. W. (Appointment as Staff Engineer)	51	232
Ayers, E. W. (Appointment as Senior Principal Scientific Officer)	58	60
B		
Baines, Lt. -Col. J. (Obituary)	58	134
Balcombe, J. (Appointment as Staff Engineer)	52	223
Barker, H. (Appointment as Staff Engineer)	56	209
Barker, H. (Appointment as Assistant Engineer-in-Chief)	59	293
Barker, P. L. (Retirement)	56	210
Barnard, A. J. (Appointment as Staff Engineer)	59	295
Barron, D. A. (Appointment as Deputy Engineer-in Chief)	53	60
Barron, D. A. (Appointment as Engineer-in-Chief)	58	51
Barron, D. A. (Retirement)	60	138
Berkeley, G. S. (Retirement)	58	137
Billen, J. C. (Appointment as Staff Engineer)	60	151
Blair, D. C. (Appointment as Chief Regional Engineer)	56	211
Boocock, R. O. (Appointment as Staff Engineer)	55	61
Booth, Capt. C. F. (Appointment as Deputy Engineer-in-Chief)	53	61
Booth, Capt. C. F. (Retirement)	56	55
Bray, W. J. (Appointment as Staff Engineer)	51	233
Bray, W. J. (Appointment as Deputy Director of Research).	58	134
Bray. W. J. (Appointment as Director of Research)	59	291
Brockbank, R. A. (Retirement)	60	152
C		
Calveley, C. E. (Appointment as Assistant Engineer-in-Chief)	53	61
Calveley, C. E. (Appointment as Director of Engineering)	60	150
Carasso, J. I. (Appointment as Senior Principal Scientific Officer)	58	138
Carter, F. C. (Retirement)	56	205
Coleman, W. L. A. (Appointment as Chief Regional Engineer)	56	205
Cook, A. (Appointment as Staff Engineer)	51	234
D		
Davies, H. G. (Retirement)	52	224
Davison, G. N. (Appointment as Staff Engineer)	51	234
de Jong, N.C.C. (Appointment as Staff Engineer)	54	139
de Jong, N. C. C. (Appointment as Assistant Engineer-in-Chief	57	277
de Jong, N. C. C. (Appointment as Deputy Engineer-in-Chief)	59	290
Duerdoth, W. T. (Appointment as Staff Engineer)	59	296
E		
Edwards, J. J. (Retirement)	56	283
Edwards, S. J. (Appointment as Chief Regional Engineer)	55	132
Edwards, S. J. (Appointment as Deputy Regional Director	58	137
F		
Finlayson, Captain I. R. (Appointment as Submarine Superintendent)	54	60
Forty, A. J. (Appointment as Staff Engineer)	58	213
Francis, H. E. (Appointment as Staff Engineer)	52	222
Francis, H. E. (Appointment as Deputy Regional Director)	59	136
Franklin, R. H. (Retirement)	60	72
Freebody, J. W. H. (Appointment as Staff Engineer)	51	233
Freebody, J. W. H. (Appointment as Assistant Engineer-in-Chief)	59	135
Freebody, J. W. H. (Retirement)	60	233
G		
Gordon, S. C. (Appointment as Staff Engineer)	58	135
Gould, E. F. H. (Appointment as Deputy Director, External Telecommunications Executive)	52	223

	Vol.	Page
H		
Halsey, R. J. (Appointment as Director of Research)	51	229
Halsey, R. J. (Retirement)	57	276
Harbottle, H. R. (Retirement)	55	60
Harris, Brig. Sir L. H. (Retirement)	53	58
Harris, L. R. F. (Appointment as Staff Engineer)	60	74
Hines, R. J. (Retirement)	57	208
Holmes, M. F. (Appointment as Senior Principal Scientific Officer)	55	133
Horne, F. A. (Appointment as Staff Engineer)	59	136
Hudson, W. E. (Retirement)	55	206
Humphries, W. A. (Appointment as Staff Engineer)	58	210
Humphries, W. A. (Appointment as Assistant Engineer-in-Chief)	59	292
J		
Jarvis, Dr. R. F. J. (Retirement)	59	221
Jemmeson, A. E. (Appointment as Staff Engineer)	58	212
Jolley, E. H. (Retirement)	52	298
Jones, R. E. (Appointment as Assistant Engineer-in-Chief)	52	221
Jones, R. E. (Transfer to Ministry of Technology)	58	210
Jowett, J. K. S. (Appointment as Staff Engineer)	58	211
K		
Kilvington, T. (Appointment as Staff Engineer)	56	57
Knight, N. V. (Appointment as Staff Engineer)	57	280
Knox, A. H. C. (Appointment as Chief Regional Engineer)	55	206
Knox, J. (Appointment as Chief Regional Engineer)	58	136
L		
Laver, F. J. M. (Appointment as Staff Engineer)	57	279
Law, H. B. (Appointment as Staff Engineer)	56	57
Law, H. B. (Appointment as Deputy Director of Research)	59	291
Lawrence, J. A. (Appointment as Staff Engineer)	54	276
Leckenby, A. J. (Appointment as Chief Regional Engineer)	59	220
Leech, Captain W. H. (Retirement)	54	60
Leigh, H. (Appointment as Staff Engineer)	51	231
Leigh, H. (Appointment as Deputy Director, E.T.E.)	56	204
Little, G. J. S. (Retirement)	51	228
Lucas, F. N. (Appointment as Chief Regional Engineer)	52	224
M		
Maddison, W. H. (Appointment as Staff Engineer)	56	206
May, C. A. (Appointment as Staff Engineer)	59	294
Mellor, S. D. (Appointment as Chief Regional Engineer)	58	210
Merriman, J. H. H. (Appointment as Staff Engineer)	53	206
Merriman, J. H. H. (Appointment as Assistant Engineer-in-Chief)	56	56
Merriman, J. H. H. (Appointment as Deputy Engineer-in-Chief)	58	59
Merriman, J. H. H. (Appointment as Senior Director of Engineering)	60	139
Metson, G. H. (Appointment as Deputy Director of Research)	55	59
Metson, G. H. (Appointment as Director of Research)	57	276
Metson, G. H. (Retirement)	59	290
Mew, G. M. Appointment as Chief Regional Engineer	53	281
Moffatt, C. E. (Retirement)	56	207
Morgan, T. J. (Appointment as Chief Regional Engineer)	60	153
Mumford, A. H. (Appointment as Engineer-in-Chief)	53	59
Mumford, A. H. (Award of K. B. E.)	56	136
Mumford, Sir Albert H. (Retirement)	58	50
N		
Nicholls, C. A. L. (Appointment as Chief Regional Engineer)	56	208
P		
Phillips, R. S. (Retirement)	57	281
Piggott, J. (Appointment as Staff Engineer)	57	281
Proctor, W. S. (Retirement)	55	132

	Vol.	Page
R		
Revell, H. J. (Appointment as Chief Regional Engineer)	57	208
Reynolds, F. H. (Appointment as Senior Principal Scientific Officer)	59	294
Rhodes, J. (Appointment as Staff Engineer)	52	298
Richards, C. E. (Appointment as Deputy Director of Research)	51	230
Richards, C. E. (Retirement)	55	59
Richards, D. L. (Appointment as Staff Engineer)	59	296
Roberts, F. F. (Appointment as Senior Principal Scientific Officer)	58	138
S		
Salter, L. F. S. (Appointment as Staff Engineer)	51	232
Salter, L. F. S. (Retirement)	57	278
Scowen, F. (Appointment as Staff Engineer)	60	153
Smith, W. F. (Retirement)	51	230
Sowton, C. W. (Appointment as Staff Engineer)	54	208
Speight, E. A. (Appointment as Senior Principal Scientific Officer)	52	74
Stanesby, H. (Appointment as Deputy Director of Research)	53	206
Stratton, J. (Retirement)	56	208
Swain, E. C. (Appointment as Staff Engineer)	59	220
T		
Thomas, J. F. P. (Appointment as Staff Engineer)	60	73
Thompson, A. J. (Appointment as Chief Regional Engineer)	58	212
Thomson, W. E. (Appointment as Senior Principal Scientific Officer)	59	137
Tillman, Dr. J. R. (Appointment as Deputy Director of Research)	58	60
Tolley, L. L. (Retirement)	56	204
U		
Urban, T. F. A. (Appointment as Staff Engineer)	57	278
W		
Warren, A. C. (Retirement)	52	221
Watt-Carter, D. E. (Appointment as Staff Engineer)	56	209
Webber, F. W. J. (Appointment as Staff Engineer)	56	283
Wheeler, L. K. (Appointment as Staff Engineer)	58	279
White, R. W. (Appointment as Staff Engineer)	58	61
Williams, H. (Appointment as Assistant Engineer-in-Chief)	51	229
Williams, H. (Retirement)	59	293
Williams, M. B. (Appointment as Staff Engineer)	59	221
Williams, M. B. (Appointment as Deputy-Director of Engineering	60	233
Wray, D. (Appointment as Deputy-Director of Engineering)	60	151

PRINTED BY Unwin Brothers Limited
THE GRESHAM PRESS OLD WOKING SURREY ENGLAND

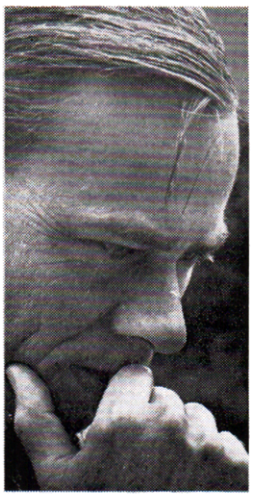
Produced by 'Uneoprint'

A member of the Staples Printing Group (UHOL3323)

think of GEC·AEI and you think of...

Research
Development
Design

Surveying.
Planning,
Systems Design,
Installation
Commissioning

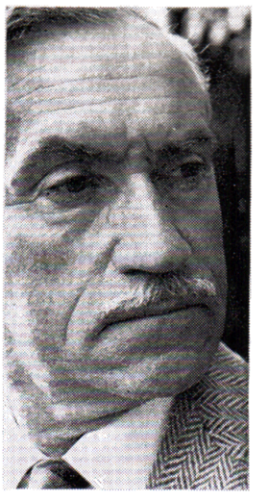


Transmission by
Radio, Cable and
Open-Wire Line

Frequency Division
and Digital
Multiplex

Audio, Programme,
Signalling
Telegraph and Data
Equipment

Public Exchanges
Trunk Switching
RAX-UAX
Mobile Exchanges



PABX-PAX
Private Telephone
Systems

Telephones
Table, Wall,
Secretarial,
Loudspeaking

Maintenance
Training

International
Representation

...a complete telecommunications service

GEC-AEI Telecommunications Limited is a management company responsible for the telecommunications interests of The General Electric Co. Ltd. of England and Associated Electrical Industries Ltd.
The largest company in this field in England, and one of the largest in the world, GEC-AEI combines a vast research, development and manufacturing capability to provide a complete telecommunications service.

G.E.C.

Takes telecommunications into tomorrow

GEC-AEI TELECOMMUNICATIONS LIMITED,
OF COVENTRY, ENGLAND.

A Management Company of The General Electric Co. Ltd. of England.

IB/35A

GEC of England gets down to earth to achieve flexibility in Multiplex Equipment

From deep down in the earth come the quartz crystals to form the heart of GEC Multiplex Equipment. From top-quality crystals like this, GEC manufactures the channel filters that give its Multiplex Equipment high selectivity and flexibility.

This versatile equipment can

- carry speech, telegraphy, data or music
- by radio, cable or open-wire/transmission systems
- with built in out-of-band signalling or in-band signalling
- with or without standby generator
- with mains or battery operation

It is fully transistored, and standard group or supergroup bricks can be assembled into any combination to meet both CCITT and North American standards.

With 40 years' experience in the design and manufacture of Multiplex Equipment to meet the needs of the world's markets, GEC continues to maintain its leading position in this field.

This is one facet of the total capability in telecommunications that is offered by GEC.

G.E.C.

Takes telecommunications into tomorrow

GEC-AEI TELECOMMUNICATIONS LIMITED,
OF COVENTRY, ENGLAND.

A Management Company of The General Electric Co. Ltd. of England.

IB/34A